THE BULLETIN
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THE CITADEL

THE MILITARY COLLEGE OF SOUTH CAROLINA

1955 — 1956

CATALOGUE ISSUE

GENERAL MARK WAYNE CLARK
President

BULLETIN OF

THE CITADEL

THE MILITARY COLLEGE
OF SOUTH CAROLINA

FOUNDED 1842

CATALOGUE ISSUE

1955 – 1956

CHARLESTON, S. C.

"I call, therefore, a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war."— MILTON.

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COLLEGE CALENDAR FOR 1955-1956

1955

Summer Session

June 20, Monday, 9:00 A. M.	Session begins
July 4, Monday	A holiday
July 30, Saturday	First-half session ends
August 1, Monday	Second-half session begins
September 10, Saturday	Session ends

First Semester

September 12, Monday, 9:00 A. M.	New cadets report
September 19, Monday, 9:00 A. M.	Old cadets report
September 20, Tuesday, 8:00 A. M.	Classes begin
October 22, Saturday	Parents' Day
November 12, Saturday	Homecoming Day
November 22, Tuesday, 1:00 P. M.	Thanksgiving holidays begin
November 27, Sunday, 6:00 P. M.	Thanksgiving holidays end
December 17, Saturday	Christmas holidays begin

1956

January 3, Tuesday, 8:00 A. M.	Christmas holidays end
January 19-27	Examinations
January 28, Saturday	First semester ends

Second Semester

January 30, Monday, 8:00 A. M.	Second semester begins
February 22, Wednesday	Washington's Birthday, a holiday
March 17, Saturday	Corps Day
March 29, Thursday, 1:00 P. M.	Easter holidays begin
April 3, Tuesday, 8:00 A. M.	Easter holidays end
May 22-30	Examinations
June 2, Saturday	Commencement

The Citadel is a military college, but its chief concern is to prepare men for civil life. Because of the military record of Citadel graduates, there has grown up a wrong impression that the institution exists to prepare men for war. The College is justly proud of the war record of its sons and will always expect them to respond in national emergencies, but its chief purpose is to prepare men for civil pursuits by giving them a sound education reinforced by the best features of military training.

Military training teaches the value of system and order in approaching tasks, of physical and mental fitness, and of alertness and self-confidence. It teaches how to command and how to obey, how to organize and co-ordinate, and how to maintain morale and discipline. Most important of all, it instills the conviction that any sacrifice must be made when principle is involved and that truth, honor, and integrity are the basis of character.

A civic leader, no less than a military commander, must be prepared to meet difficult or hazardous situations courageously and effectively, to make decisions and enforce them, to lead when it is his duty to lead, to follow when it is his duty to follow, and to inspire confidence through his resourcefulness, honesty, and courage. Such qualities The Citadel attempts to develop in its cadets.

The training is not given at the expense of academic education. On the contrary, the aim is to make academic training more effective through development of soldiery virtues. Graduates in many vocations and in many parts of the world attest the value of the rigorous regimen of classroom, barracks, and drill field.

Many desirable characteristics do not grow out of scholarship alone; traditions and codes may more profoundly influence college men than the most scholarly lectures. For this reason, to its academic training, which it assiduously seeks to make vital, The Citadel adds the code of the cadet and gentleman. The visible symbol of this is the proudly-worn uniform, a constant reminder that alma mater expects of every son the poise and culture of a student, the public spirit and unselfishness of an enlightened citizen, the courage and loyalty of a soldier, and the honor and bearing of a gentleman.

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Instructor in Fine Arts

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The Old Location and the New

The history of The Citadel may be divided into two parts. In the first, extending from December 20, 1842, when the legislature of South Carolina passed the act providing for the establishment of the school, to September 1922, the institution was located on a narrow strip of land along the north side of Marion Square. This is an open space of about ten acres in what has long been the middle of the historic city of Charleston, South Carolina. In the second, extending from 1922 to the present, The Citadel has been situated some three miles northwest of its former location on a campus of about eighty acres between Hampton Park and the Ashley River.

How The Citadel Got Its Name

The school derived its name from the building in which it was first housed. Erected with state funds as an arsenal some years after the frustration of the Denmark Vesey slave uprising of 1822, this sturdy old fortress, which still dominates Marion Square, was called The Citadel. It was garrisoned first by Federal, then by state, troops until these last were replaced in March 1843 by the twenty students who made up the first Corps of Cadets. Living under regulations much like those of West Point, these cadets served as a guard for the state's arms at the same time as they pursued a course of study designed to make them useful citizens in time of peace as well as war.

With its sister school The Arsenal, established at the same time in Columbia, the state capital, The Citadel was a part of what came to be known as the South Carolina Military Academy. From 1845 to 1865 cadets of the Academy spent their freshman year at The Arsenal and their three upper-class years at The Citadel.

The first period of the school's existence on Marion Square lasted until 1865. During this period an east and a west wing were added to the original building, high standards of intellectual and military discipline were maintained, and enrollment was built up to 145 cadets on January 1, 1864.

The Citadel in the Civil War

The founders—men like Governors Richardson and Hammond and General D. F. Jamison, who was later to preside over the convention at which the South Carolina Ordinance of Secession was signed—had foreseen that the state might soon need men with military training. When the trouble long brewing between the North and the South erupted in war, the record of Citadel alumni and cadets vindicated the foresight of the founders. Of the 224 alumni living at the time of the Civil War, 193 wore the Confederacy's gray, all but twenty as

commissioned officers and four as generals. Thirty-nine were killed in battle, and four died in the service. On January 9, 1861—before the firing on Fort Sumter—cadets of the Corps manned the guns which drove back from the entrance of Charleston harbor the *Star of the West,* a steamer sent by the Federal government to the relief of the fort. Made part of the military organization of the state by a legislative act of January 28, 1861, the Corps of Cadets helped emplace and guard artillery on James Island, did guard duty in Charleston, and on December 6 and 7, 1864, near the war's end, suffered several casualties in an engagement with Union troops at Tulifinny Creek, near Yemassee Station, while helping to defend the Charleston and Savannah Railroad.

Very shortly afterwards came some years of eclipse for The Citadel. From February 18, 1865, when a Union force marched into Charleston, until April 1879, the buildings on Marion Square were occupied by Federal troops, and the operation of the school was necessarily suspended.

The Re-opening after the Civil War

The second period of The Citadel's existence on Marion Square began on October 2, 1882, with an enrollment of 185 cadets. Though the Corps no longer served as an arsenal guard, the military system of the ante-bellum years was in all other respects continued. The re-opening of the school was the culmination of efforts begun by alumni in April 1877. At their request Governor Hampton had appointed a Board of Visitors in 1878, and in January 1882 the state legislature had passed a bill providing for the re-establishment of the school and appropriating money for the repair of its buildings and for its maintenance. The Arsenal in Columbia, its buildings having been burned during the Civil War, was never reopened.

In the forty years that passed before The Citadel moved to its present site, the physical plant was still further enlarged, part of the cost being defrayed with money collected in 1888 from the Federal government for rent and for damages sustained during the years the buildings were occupied by Federal troops. The enrollment was also increased, and the curriculum was made somewhat more flexible. In 1910 the name of the school was changed to The Citadel: The Military College of South Carolina. This change was made to keep people from regarding the institution as a preparatory school, something it was not and had never been.

In 1918, during the administration of Mayor T. T. Hyde, the city council of Charleston offered the state the present site of the school, a tract of about eighty acres of high land and one hundred acres of salt marsh. Early in 1919 the state legislature accepted the offer and appropriated money for the erection of the first buildings.

The Greater Citadel

In the fall of 1922 the school began operating at its new location. There were then only a few buildings on the campus. In the thirty-three years that have since elapsed many have been added to those originally constructed. (See Grounds and Buildings, page 23, for a complete description of the present campus.)

Changes in the curriculum and in the nature of the student body have paralleled those in the physical plant. In the first place, the elective system has been considerably expanded. In the last year at the old location it was possible for a student to major in any one of three fields during his junior and senior years: chemistry, civil engineering, and physics. In his senior year the student was then able to major in one of two others: biology-chemistry and English. Now students may choose among the following, all of which offer major work for at least the junior and senior years: business administration, chemistry, civil enginering, electrical engineering, English, history, mathematics, modern languages, physical education, physics, and political science. In addition, pre-medical and pre-dental courses are now available as are courses in Greek, Latin, education, psychology, sociology, and appreciation of art and music.

Changes in the Student Body

In the nature of the student body there have been four significant changes. The first is that it has grown much larger. In 1921-1922 there were fewer than three hundred cadets in the Corps and only fifty-four were graduated; in 1947-1948, when the student body was the largest the school ever had, there were 2,271 and 203 graduated. The second change is that, with the passing of Public Law No. 346, popularly known as the G. I. Bill of Rights, nearly three thousand veterans of the Second World War, most of whom have been civilian students, have attended the college. Since the end of the fighting in Korea, nearly 200 veterans of this war have also been enrolled. The third is that women have been admitted as students, although only to summer sessions, since June 20, 1950, and to night school, in the same year. The fourth change is that the majority of the students now come from outside the state. In 1921-1922 ninety percent were South Carolinians; in October 1953 forty-four percent were from South Carolina, although the number of South Carolina students was larger than the whole Corps used to be at the old location.

The growth of the Corps is further reflected in the fact that, while there were 315 Citadel graduates and ex-cadets in the armed forces in World War I, there were about six thousand alumni and ex-cadets on active service in World War II; of these, 280 died for their country. Some fifteen hundred were on active duty during the Korean conflict,

450 of whom were in combat and twenty-six of whom gave their lives. Virtually all graduates on active duty have been commissioned officers.

Memorials to the Makers

Persons prominent in The Citadel's history are memorialized in campus structures. For example, the mess hall is named after Colonel Asbury Coward, superintendent from 1890 to 1908; the largest barracks, after Colonels James Padgett, member of the Board of Visitors for many years, and J. P. Thomas, its longtime chairman; the stadium, after General Johnson Hagood, chairman of the Board at the time the school was re-established after the Civil War; another barracks, after Mr. Andrew B. Murray, philanthropist whose generosity made possible the construction of that building and several others; LeTellier Hall, after Colonel L. S. LeTellier, for many years head of the Department of Civil Engineering and later Acting President of the college; the largest academic building, after Colonel O. J. Bond, president from 1908 to 1931; and the chapel, after General Charles P. Summerall, former Chief of Staff of the United States Army, who succeeded to the presidency in 1931, and who, after leading The Citadel through its period of greatest growth and making the college nationally known, retired as president emeritus in June 1953.

Good Signs for the Future

Since that date the most significant events in the history of The Citadel have been three of the most generous gifts ever made to the college and the inauguration of another distinguished soldier to succeed General Summerall as President.

The first gift, public announcement of which was made on August 31, 1953, was the bequest by Mr. Joseph D. Aiken, of Charleston, South Carolina, of $750,000. The other two gifts, both made by United States Senator Charles E. Daniel, of Greenville, South Carolina, and his brother, Mr. R. Hugh Daniel, of Birmingham, Alabama, were the Thomas Dry Howie Memorial Carillon and the sum of $50,000 for scholarships. The scholarship gift was announced on October 9, 1954. On December 5, 1954, was held the ceremony dedicating the Carillon to the memory of Major Howie, of the class of 1929, who died heroically in the fighting at St. Lo, France, on July 17, 1944. (See Grounds and Buildings, page 23, for a description of the Carillon.)

General Mark Wayne Clark, who commanded the United Nations forces in Korea, was inaugurated as President of The Citadel on March 19, 1954.

Location

The Citadel is located on a seventy-eight acre campus in the northwestern part of the City of Charleston. The view to the west and south across the Ashley River, which skirts the campus, is typical of the Carolina Low Country scenery. From the east, the campus is entered through Hampton Park, a show place of flowers, trees, terraces, and sunken gardens. From the north and south, the entrances are through residential areas of the city.

Buildings

The buildings, both in design and location, follow the carefully prepared plan made by a firm of distinguished architects for the new campus. Architecturally, the buildings follow the Spanish-Moorish style of the original campus in the heart of the city. All structures, such as barracks, academic and administrative buildings, chapel, armory, and student activities building, border the large parade ground, which forms the center of the campus.

Bond Hall

Bond Hall, the largest building on the campus, contains in the center part the administrative offices of the college, the offices of the Association of Citadel Men, and the main library. In the large wings are academic departments, laboratories, and classrooms.

Arts Building

One of the most recent additions to the campus is the Arts Building, where the arts departments and classrooms are located.

LeTellier Hall

LeTellier Hall contains the Department of Civil Engineering, with its library, classrooms, and laboratories.

The Armory

The Armory with its annexes is used for indoor drills, athletic contests, dances, and other activities and functions at which large crowds are assembled. The main room has a floor surface of three thousand square feet, supported independently from the rest of the building, and and a ceiling clearance of sixty-five feet. The steel galleries of this room will seat approximately two thousand four hundred spectators.

An annex at the rear of the armory contains the swimming pool, with pressure filters, sterilizing, and heating apparatus to assure cleanliness and to provide year-round use.

The Chapel and Carillon

The General Charles Pelot Summerall Chapel, on the east side of the campus, faces the row of barracks which forms the western boundary of the parade ground. The cathedral-like proportions of the Chapel with its fine pipe organ and splendid memorial windows of stained glass create an atmosphere of religious piety befitting its purpose.

To the north of the Chapel is the Major Tom Howie Carillon, a

recent gift of two Citadel alumni, Senator Charles E. Daniel and his brother Mr. R. Hugh Daniel, in memory of the famous "Major of St. Lo," a classmate of the donners.

Barracks

The four dormitories, or barracks, of brick and concrete construction, are rectangular with paved interior courts enclosed by galleries. Each room accomodates two cadets and is equipped with hot and cold water.

Coward Hall

Centrally located behind the barracks is the cadet dining hall, with a seating capacity of two thousand. Constructed of concrete and tile, this building is fully equipped with the modern facilities for storing, preparing, and serving food in the most approved manner. Dining-room floors are of terrazzo, kitchen and other floors of ceramic tile, and all wainscots of glazed brick, so that cleanliness and sanitation are easily maintained.

The Mary Bennett Murray Hospital

The college infirmary conforms with the most modern standards of equipment and personnel. The college surgeon is aided by a head nurse and her assistant.

Alumni Hall

Minor sports and other recreational and religious activities are held in this building.

The Student Activities Building

In this large building are the administrative offices of student activities. In it is also a large auditorium, equipped for theatrical productions, or for lectures and receptions. A dormitory for visiting teams, cadet canteen, barber shop, post office, game room, and hostess' rooms are all located in this building.

Faculty and Staff Residences

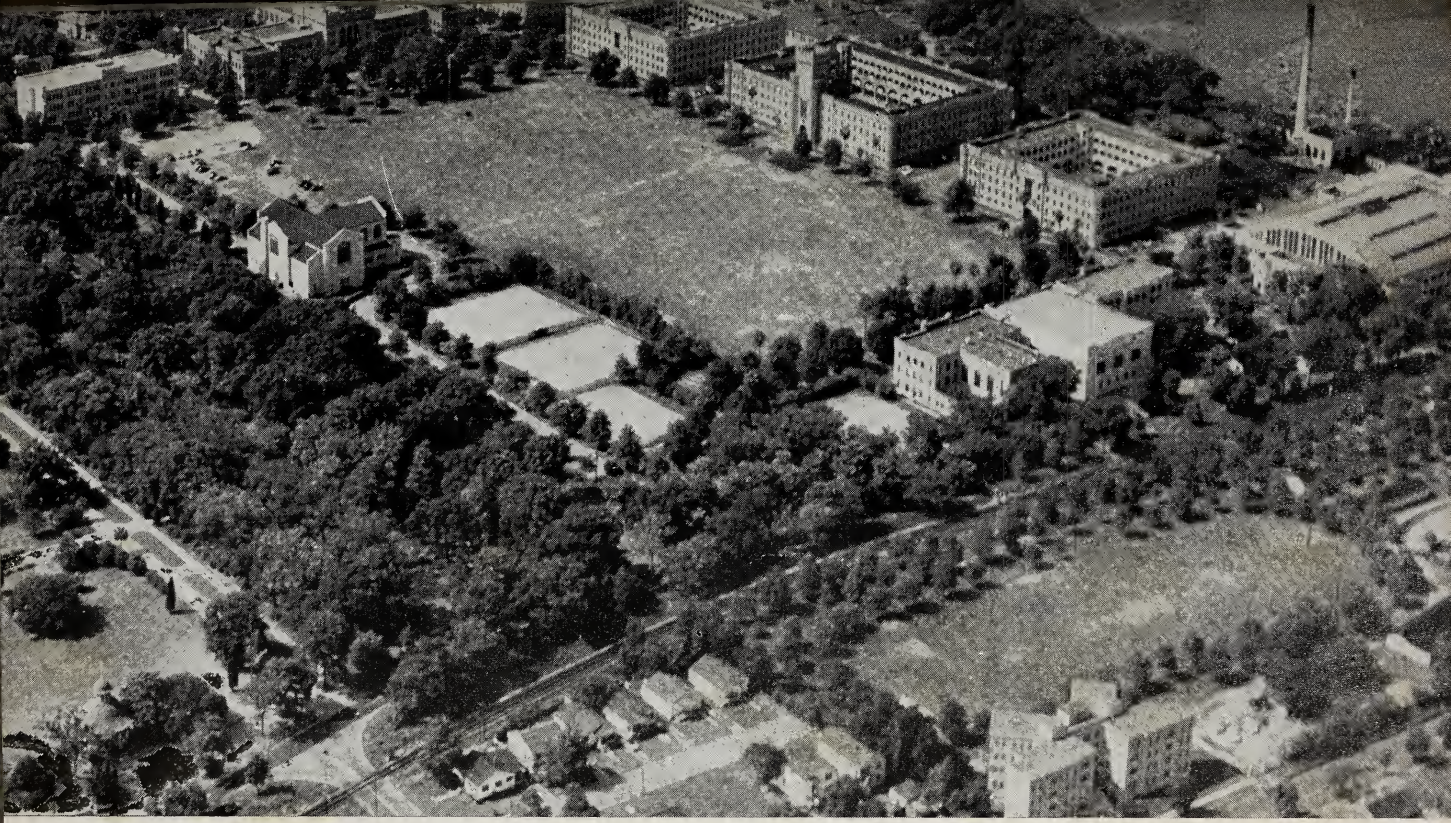
The President's House and the quarters of the faculty and staff are located on the southern and northern perimeter of the campus.

Utilities

A modern steam plant, laundry, machine shop, carpenter shop, tailor shop, print shop, and the like are inconspicuously grouped in the northwest corner of the campus.

Athletics

On the extreme north end of the campus is a large cadet athletic field, which provides space for a football field and a quarter-mile running track, with a two hundred and twenty yard straightaway. There are ten tennis courts in addition to the usual courts for intramural sports.



AIR VIEW OF THE CAMPUS

INTERIOR OF THE GENERAL CHARLES PELOT SUMMERALL CHAPEL

Educational Standing

The Citadel is a fully accredited senior college. It is a member of the Southern Association of Colleges and Secondary Schools and is on the approved list of the Association of American Universities.

The Civil Engineering Department is accredited by the Engineers' Council for Professional Development.

System of Management

The Citadel is essentially a military college. Leadership, initiative, and character are developed by placing upon cadets the great responsibility of controlling all units in the military organization.

All cadets live in barracks. From reveille to taps, every hour of the cadet's time is accounted for. The regular habits of study and living thus formed, the attention to duty, obedience to authority, and love for order inculcated are considered among the most valuable features of the military education. While some of the graduates enter the military profession, hundreds in all walks of civil life attest to the high value of the training received at the institution.

The daily routine is regulated by the *Cadet Regulations,* generally known as the "Blue Book." A copy of this manual will be furnished to parents or guardians upon request.

Reserve Officers' Training Corps

The Citadel is justly proud of the record of its ROTC branches. For more than fifteen years it has had the highest rating by the Department of Defense.

The courses of study in ROTC are those prescribed by the Department of Defense.

New students have a choice of Army or Air Force ROTC. The Citadel is not bound by rigid percentage enrollment quotas, and it is not anticipated that this procedure will change anytime during the forseeable future. However, the Air Force ROTC Detachment is primarily concerned with training potential pilots and aerial observers which require higher physical standards that other services. Therefore, all new students enrolling in the AFROTC at The Citadel are carefully counselled and advised as to the possibility of receiving an advanced course contract leading to a commission in the Air Force.

U. S. Military and Naval Academies

Since The Citadel is not a preparatory school, it has no courses specifically designed to prepare students to enter the national military and naval schools at West Point and Annapolis. The regulations for admission to these institutions provide for the acceptance of work done in certain accredited colleges, of which The Citadel is one, in place of the

usual mental examination. Many Citadel cadets have entered both West Point and Annapolis by certificate under these regulations.

Physical Examination

A thorough physical examination is required of all applicants for admission. Forms for reporting the results of the examinations are supplied by the Office of the Registrar and when completed should be mailed to the Registrar.

Furloughs

A suspension of work for ten days, including Christmas Day and New Year's Day, is required by law.

The Corps of Cadets is furloughed from the end of the second semester until the opening of college in September.

By applying for permission for their sons' entry to The Citadel, parents voluntarily relinquish control over them to the authorities of the college, and it is expected that they will not ask for furloughs for their sons except in emergencies. In every case the reason for furlough should be stated and the decision left to The Citadel authorities whether the circumstances warrant the approval of the application. This must be done before furloughs will be approved.

It is not the policy of The Citadel to grant discharges between the completion of examinations and the Commencement exercises or the beginning of a furlough. Cadets may withdraw at such times only by order of the Chairman of the Board of Visitors or the President.

Special and Emergency Leaves

The following paragraphs are sections from the handbook *Cadet Regulations*:

25.04. SPECIAL LEAVE. a. Special leave may be granted upon the request of the parent or guardian in the event of the marriage of a member of the cadet's immediate family, or a golden wedding anniversary in the cadet's family. The immediate family includes parents, grandparents, brothers, sisters and the permanent resident members of the family.

b. Special leave may be granted under exceptional circumstances clearly stated by the parent showing the necessity for such leave. In all cases the final decision must rest with the authorities of the college.

25.05. EMERGENCY LEAVE. An emergency leave for five (5) days subject to extension, if necessary, will be granted to a cadet upon the receipt by the Commandant of Cadets or the Officer in Charge of a letter or telegram containing news of the death or critical illness of a member of the cadet's immediate family. If any other emergency arises in a cadet's home requiring the cadet's presence, the facts should be set forth clearly by the parent or guardian in a written communication

making request for leave. Decision as to whether or not leave will be granted must be left to the authorities of the college. In cases of emergency the cadet need not make application for leave. A special order for emergency leave will be issued upon the request of the parent or guardian only, and the cadet will be released to take the first available transportation to his home.

40.07. MEDICAL SERVICE. Except in an emergency occurring on leave and requiring immediate medical attention, a cadet will not arrange for or receive professional treatment from doctors or specialists without permission from the Surgeon. Applications for any special leaves required for such treatment will be submitted to the Commandant and referred to the Surgeon.

40.08. SPECIAL MEDICAL AND DENTAL SERVICES. Dental work, special examination of eyes, etc., should be looked after during the summer or the Christmas furlough. Leaves should not be requested for this purpose. In cases of emergency there are competent specialists and ample facilities in Charleston for taking care of any needs of cadets. In matters of health, the regular Surgeon of the college will advise the proper course to be taken. In case the services of a local dentist, oculist or other specialist are deemed necessary, the request therefor will be submitted to the Commandant of Cadets and by him referred to the Surgeon, who, if he approves the request, will make all necessary appointments for the cadets, and return the application to the Commandant for final action.

Military training is continuous from day to day, and the Military grade awarded a cadet is a combination of his practical and theoretical work. Since there is no way for a cadet to make up practical work which he has missed, it is necessary to make deductions from his Military grade for any days of training missed because of leaves of absence.

Week End Leave

Week end leaves are authorized as follows:

Class	*Number each school year*
Senior	6
Junior	3
Sophomore	3
Freshman	2

In all cases written authorization from a parent or guardian for a cadet to avail himself of the privilege must be on file in the Office of the Commandant.

Hazing

The practice of hazing is becoming less and less common in our colleges. It is a practice which should be totally abolished, because, if

countenanced at all, it almost invariably is carried to excess by a few irresponsible students.

At The Citadel, where all the cadets live together in barracks, the presence of individuals who are obsessed with the idea that beatings and indignities are a part of a student's education cannot be tolerated; and no student is wanted in the Corps who does not subscribe voluntarily to the regulations which absolutely bar hazing.

The regulations concerning hazing are contained in the following resolutions of the Board of Visitors

Whereas, The Statutes of the State make is unlawful for any student to engage in hazing (XXVIII, Statutes at Large, page 619), and

Whereas, This Act requires the governing board of all colleges supported in whole or in part by the State to formulate and issue such regulations as may be necessary to enforce this law.

Therefore, be it resolved, That the Board of Visitors of The Citadel, in compliance with the law cited, hereby adopts the following regulations:

1. Every cadet will be required to subscribe to the following promise:

I, (Name of cadet), hereby promise that I will not engage in hazing in any form during my connection with The Citadel.

(Signature of Cadet)

2. In any apparent case of hazing, where the facts do not come directly under the observation of the authorities, the Commandant of Cadets will require each cadet in the corps to make a statement whether he was involved in the case, and if so, the facts relating to his connection therewith. In every case where a cadet is guilty of hazing, he shall immediately withdraw from The Citadel, and the facts in the case together with the statement of the cadet will be forwarded to the Board of Visitors.

3. The acceptance of these regulations by the parents or guardian of each cadet and also by the cadet himself will be required before such cadet will be admitted to the college.

4. Hazing is defined to be striking, laying hands upon, treating with violence, or offering bodily harm to a cadet who has been connected with the college for less than one year, or other treatment of a harassing, tyrannical, abusive, insulting, or humiliating nature, or that may endanger the physical well-being of such cadets.

Requiring a fourth classman to perform any personal service whatever for a member of the higher classes constitutes hazing.

Customs and Courtesies

Customs and Courtesies, a twenty-nine-page booklet published at The Citadel, is designed to provide cadets with a compact manual of good deportment. This manual is used as the textbook in a course in de-

portment given by the Department of Military Science and Tactics.

After explaining clearly the value of a knowledge of the correct way of conducting oneself in social contacts, the booklet presents detailed information on such matters as personal appearance and dress, correct speech, table manners, introductions, calling cards, calling, social correspondence, overnight visits, and punctuality.

Religious Influences

The Citadel is non-sectarian, but its high objectives cannot be achieved unless its educational program is founded on a solid religious life. Divorced from the spiritual aspirations of the individual and of the group, education is likely to destroy greater values than it creates. The basic purpose of education is to integrate its curricula with character-building activities and a normal religious life to the end that young people may be not only more efficient but better motivated by a sense of duty and obligation. Thus, in an atmosphere of tolerance and mutual respect, every cadet is encouraged to maintain his ties with the religious group to which he belongs, and the college attempts to provide the means by which such association may be made most fruitful.

It is significant that the college in planning its present building program thought first of a cadet chapel which in size, dignity, and beauty would be a fitting reminder to all cadets that education must be founded upon spiritual strength. This great building, always accessible, imposing and churchly, is dedicated to no denomination or creed, but is a shrine of religion, of patriotism, and of remembrance in which any group of good will and seemly purpose may hold services and feel at home in doing so.

Within its walls ministers of many denominations take turns in conducting the regular nine o'clock service held every Sunday morning, which is attended by all cadets except those of the Roman Catholic and Jewish faiths. Early every Sunday morning there is a low celebration of the Holy Communion for Episcopalians, followed by a low mass for Roman Catholics. At regular intervals—monthly, bi-monthly or quarterly, as is usual with the denomination—communion services are held for each of several Protestant groups directly following the nine o'clock service. Cadets of the Jewish faith attend religious instruction under a local rabbi in a room set aside for the purpose in a Cadet Activities Building. The local Episcopal, Methodist, and Roman Catholic bishops provide chaplains for cadets of their communions, and leading ministers of other sects act as spiritual advisors to cadets of their groups.

Special services are held for Episcopalians on Ash Wednesday and Good Friday, and special early masses on holy days of obligation for Roman Catholics. During the Advent season, and shortly before the be-

ginning of the Christmas furlough, a great carol service is held, participated in by representatives of Charleston choirs and by Anglican, protestant, and Roman Catholic clergymen. Annually, parallel religious emphasis week programs are conducted under three auspices—those of the Y.M.C.A. for Protestant cadets, the Newman Club for Roman Catholics, and the Jewish Club for members of that faith. These programs, led by outstanding speakers, are intended to bring into clearer relief a sense of the dignity and manliness of the religious life.

In all of the services thus conducted and in the other influences which the college brings to bear on its cadets, it is sought to avoid the causal and the perfunctory. Cadets are encouraged to regard contacts with their churches as vital to their education and development, and the act of worship as a deeply significant exeprience that should be accompanied by dignity, reverence, and gratitude. Thus, on Sunday mornings one may view the impressive ceremony of battalions of cadets, each marching from its respective barracks across the drill field and converging on the chapel, and will sense no evidence of mere routine in their attitude. On the contrary, in this reassuring spectacle and in the service that follows, there is a fine manifestation of respect and reverence for this hour as the most significant of the entire week. The college realizes that these services, and the underlying religious life of which they are the outward manifestations, must be more than a mere gesture. Otherwise young men will find, as their intellectual horizons widen and they come into possession of the uncertain techniques of lay learning, that there is a temptation to abandon religious teaching as guide and to substitute "reason" for faith as the ultimate guide. From this peril education must protect itself by constantly reminding young people that education builds and enriches life not by abandoning religious faith as outmoded, but by accepting it as the source of truth and understanding.

The inscription on the front of the chapel is "Remember now thy Creator in the days of thy youth."

Religious Groups

For Episcopal cadets there is a student parish, "St. Alban's at The Citadel," for Roman Catholic cadets, The Citadel Newman Club, and for each other group an appropriate club; these meet on Monday evenings for instruction by the chaplain or spiritual advisor, and to plan social functions in co-operation with civilian young people's groups of similiar churches in Charleston. At the 9 o'clock general service Sunday mornings there is a de-emphasis on doctrine; on Monday evenings doctrinal training is paramount, so that cadets may leave The Citadel stronger in their faith than before they entered.

Y. M. C. A.

The Citadel Y. M. C. A., organized in 1886, is an important part

of the religious and social life of the cadets. The work is supervised by a student committee, a cabinet, and a full-time executive secretary.

Services of a leader in the field of religious education are engaged for a week during the college year, which is known as Religious Emphasis Week. Daily meetings are held and an opportunity is afforded the cadets for personal conferences with the leader.

To the Association are also entrusted the upkeep of recreation rooms, the maintenance of telephone service, and the publication of a handbook.

A sub-station of the United States Post Office is operated at The Citadel under the direction of the Y. M. C. A. Secretary.

Clubs and Fraternities

It is not considered in keeping with the democratic ideals of The Citadel to encourage the formation of exclusive societies or fraternities, membership in which is based on other requirements than individual worth and achievement. When new cadets report to the college, all are at once put in uniform and, as far as possible, all artificial distinctions based on wealth, position, or influence are minimized and the cadet is encouraged to achieve his place by individual merit. All cadets live under practically identical conditions, and all are rated by the same standards, but there is a wide range of opportunity for each to develop in accordance with his needs and aptitudes. Elsewhere in this booklet are described the various clubs, organizations, and activities that are open to all cadets.

Music

In addition to The Citadel band, which constitutes one of the drill and administrative units into which the Corps of Cadets is organized, the college affords several excellent ways in which cadets may develop their musical interests.

Through the Carnegie Corporation the college has acquired a very valuable music set consisting of an electric phonograph, nearly seven hundred records, and various books dealing with musicians and music appreciation.

The cadet orchestra, the "Bull Dogs," plays for the informal dances and at other campus functions. The cadet choir, the music club, and the glee club are also important parts of college life.

The Library

The college library is located on the third floor of Bond Hall in a position of maximum accessibility to all academic departments. The library space, now ample to take care of over twenty per cent of the normal student body, was approximately doubled at the beginning of the academic year 1939-40 by the addition of a large, handsomely finished and equipped reading room covering the entire third floor of the new extension to Bond Hall. This room has a gallery around three sides. The main floor is equipped with special library tables and Illumin-

ating Engineering Society lamps. The entire room is most attractively appointed and admirably suited to its purpose.

The original reading room, stack rooms, and offices of the old library are immediately adjacent to the new and connected with it by a corridor. The entire fifth floor of Bond Hall is occupied by an extension of the library, which contains certain less-used and bulky material. It is accessible to the readers at all times.

The collection of books now contains approximately 60,000 volumes and is being increased at the rate of over 2,000 volumes a year. Important additions have been made possible by gifts from Citadel alumni and other friends of the college.

In addition to the general collection there are separate departmental libraries noused in the Departments of Chemistry, Physics, and Civil Engineering. All of these volumes are listed in the catalogue of the college library.

The reading rooms are well supplied with catalogues and indexes, current magazines and newspapers, technical and scientific journals, and literary and critical reviews.

Placement Committee

A faculty-staff group known as the Placement Committee assists graduates and members of graduating classes to secure positions. No charge is made for this service, but registration with the committee and submission of necessary data for preparation of case histories are prerequisites for this aid.

VETERANS

Opportunities at The Citadel

Veteran students may enroll at The Citadel either as cadets or as civilian students. All of the services and facilities of the college are open to civilian veteran students on the same basis as for cadets. However, civilian veteran students do not room on the campus and do not buy cadet uniforms, and their college expenses are therefore much less than those for cadets. At the present time there are more than 200 veteran students enrolled at The Citadel as civilian students. They form a very significant part of the student body, and The Citadel cooperates fully to assure them of the maximum educational benefits guaranteed them by Public Law No. 550.

Those who wish to qualify for a reserve commission upon graduation must enroll as cadets and complete the advanced course of the Senior Division ROTC. Air Force and Army Regulations provide that veterans with service of twelve monthes or more may be given credit for such portions of the basic course as the PAST or PMST decides are the equivalent of the veteran's previous military experience.

To be eligible for enrollment as a cadet a veteran must be physically fit, unmarried, and under twenty-six years of age.

Applicants for admission to The Citadel must be not less than sixteen nor more than twenty-one years of age. They must be at least five feet in height and physically able to do military duty. See the statement about physical examinations under "General Information" on page 26. A certificate of vaccination is required.

Formal application for admission must be submitted by parent or guardian on the blank provided with this catalogue and should be mailed to The Registrar, The Citadel, Charleston, S. C.

Married men are not eligible for enrollment as cadets.

The requirements for admission to the freshman class are those prescribed by the Association of Colleges and Secondary Schools of the Southern States, of which The Citadel is a member. The standards of the Association require "the satisfactory completion of a four-year course of not less than fifteen units in a secondary school approved by a recognized accrediting agency, or in a secondary school that is a member of this Association, or the equivalent of such a course as shown by examination."

In accordance with the above, applicants are admited to The Citadel either by certificate or by examination. Certificates are accepted only from accredited schools and should be submitted directly to the college by the principal or superintendent of such school.

The fifteen units must include:

1. Three units of English.
2. Three or more units as a principal sequence selected from one of the following groups:
   (a) A classical language.
   (b) A modern language other than English.
   (c) Social Science (history, civics, economics, problems of democracy, sociology, geography, general business science, and commercial law).
   (d) Natural Science (physics, chemistry, botany, zoology, general biology, general science, physiology, physiography).
3. Two or more units as a secondary sequence selected from a second group listed under 2.
4. Two units or less in subjects selected from any of the groups listed under 2.
   (Total: 10 units in English and groups a-d.)
5. Five units selected from any of the secondary-school subjects accepted by an approved school for its diploma.

In addition to three units of English, applicants for admission must present credit for at least two units of mathematics and one year of history. For scientific and engineering courses three units in mathematics are strongly recommended.

Admission by Examination

Applicants whose credits comply with the requirements for admission to The Citadel but who are not graduates of an accredited secondary school must have their work validated by entrance examinations.

Advanced Standing

The courses of study at The Citadel are outlined on pages 55 through 68, and no student will be accepted as a candidate for a diploma who has not had this work, or its equivalent. It is therefore recommended that reference be made to the requirements for the freshman and sophomore years before application is made for advanced standing. An applicant for advanced standing must present an honorable discharge from the college previously attended, together with a transcript of his college record and entrance credits. It is also advisable to submit a copy of the college catalogue, in which the applicant has marked the courses which he has taken.

Reserve Officers Training Corps (ROTC) is required and all applicants for admission to The Citadel with advanced standing must present credit for the basic ROTC courses which they would have taken as cadets at The Citadel. For sophomore standing, credit for first year basic ROTC is required; for junior standing, applicant must have completed the entire basic ROTC course of instruction.

A copy of National Military Establishment (NME) Form 68 or AFROTC Form 41 attesting to completion of credits must be furnished with application or as soon thereafter as practicable for all previous ROTC credits claimed. Records must be received by the department head concerned prior to actual matriculation to permit determination of entrance level to be authorized.

It is the policy of the Department of Defense to require a student who has enrolled in an Army, Air Force, or Navy Unit of the Senior Division ROTC to be continued in that unit. This policy applies equally for students entering at a Military Junior College (MJC) or Military Institute (MI) at the preparatory level or to students transferring from other colleges or universities.

New cadets are not admited except at the opening of the session in September.

The Citadel, a state-supported institution, is operated on a non-profit basis. The cost of operation is borne through the collection of fees from the students and appropriations made by the General Assembly of South Carolina. The college reserves the right at any time to adjust fees collected from the students to meet the current cost of operation.

Payments

The Quartermaster of The Citadel is the Fiscal Officer, and all transactions relating to payments should be conducted through him. All remittances should be made by money order or check made payable to J. F. Bosch, Jr., Quartermaster, and should be mailed directly to him.

The academic year at The Citadel is divided into two semesters. For the convenience of the parents an installment system has been instituted at The Citadel for the payment of college fees. The payment of college fees for each semester is divided into two installments due on the following dates:

Installment	Date Due
First Semester:	
First Installment:	
Freshmen	September 12, 1955
Sophomores, Juniors, and Seniors	September 19, 1955
Second Installment:	November 15, 1955
Second Semester:	
First Installment	January 30, 1956
Second Installment	April 1, 1956

Bills will be rendered by the Quartermaster to parents approximately one month prior to the date the installment is due. All college fees must be paid by the dates indicated in the above schedule. A student will not be permitted to register at the beginning of each semester if the first installment of the college fees is not paid. If the second installment of the college fees of each semester is not paid by the due date, the student is subject to having his enrollment in the college cancelled.

Fees

EDUCATIONAL:

Registration Fee. — All students are required to pay each academic year a registration fee of $6.00, which is made in payments of $3.00 each semester. This fee is intended to cover the general expenses incident to matriculation each semester. The fee is not refundable.

A charge of $5.00 is made for late registration, regardless of the reason. The college cannot justify the expense of making registration convenient for late students. Those students registering late will have

to wait the convenience of those persons handling the registration and conform to the office hours which can be arranged without disturbing the routine of the offices concerned. Failure to complete registration for the semester on registration day may make the student subject to payment of the late registration fee.

Tuition. — In accordance with the laws of the State of South Carolina the tuition fee for the academic year has been established as $80.00 for students whose guardian or parents reside in South Carolina and $250.00 for students whose guardian or parents are non-residents of South Carolina. This fee is payable in two semester payments of $40.00 and $125.00 respectively for South Carolina students and out-of-state students. This fee is not refundable.

STUDENT ACTIVITIES:

A direct charge of $51.00 an academic year is assessed each student and is payable in payments of $25.50 each semester. This fee is used for the support and maintenance of such various students activities as *The Sphinx,* the cadet annual; *The Brigadier,* the cadet newspaper; the Y. M. C. A.; and athletics. The portion of the fees for athletics is not an admission fee to athletic contests since students are admitted to all athletic games free of charge. This fee is not refundable.

SERVICES AND SUBSISTENCE:

Board. — All students living on the campus are required to eat in the college dining hall. The cost is $432.00 for the academic year of two semesters. This charge is refundable on a pro-rata basis upon withdrawal from the school.

Overhead and Maintenance. — A charge of $8.00 for the academic year of two semesters is assessed each student for the normal wear and tear and maintenance of the facilities used by the students, and overhead on services provided the students.

Service Fee. — A charge of $147.00 is made for the academic year of two semesters for room, light, water, janitor service, laundry, normal hospital care, and library use. This fee is refundable on a pro-rata basis.

DEPOSITS:

Breakage. — A $5.00 deposit will be maintained by all cadets enrolled at The Citadel. When there is insufficient money in the cadet's Quartermaster Account to cover the cost of damages to buildings, rooms, equipment, or loss of R.O.T.C. Manuals and Government Property, this deposit will be used. This deposit is refundable within fifteen days after graduation or withdrawal from The Citadel.

Books and Supplies. — This deposit is used to cover the cost of books, supplies, uniform alterations, laboratory fees, engineering drawing equipment and supplies. The amount expended by each student

varies. The required deposit is based on the average needs, and in most cases is ample. The required deposits are as follows:

Freshmen	$75.00
Additional deposit for Freshmen Engineering Students (Students who elect engineering drawing will be rendered a supplementary bill for this deposit to cover the purchase of drawing instruments and supplies.)	$40.00
Sophomores	$75.00
Juniors	$50.00
Seniors	$50.00

Uniforms. — All cadets are required to wear The Citadel uniform which is issued by the college. New cadets should not bring a supply of civilian clothes other than those which are worn upon reporting to the college as they are not permitted to wear civilian clothes except during authorized furloughs. It is also advisable to bring inexpensive trunks or suitcases since it is not permissible to retain them in the cadet's room; luggage must be stored in a warehouse provided for such at the risk of the owner.

Cost of uniforms should not be considered as an educational expense but rather a clothing expense which is incidental to attending any college. With proper care, the uniform should last for several years. Of course, the requirements during the subsequent years will depend on the manner in which the cadet has cared for his uniform. Small deposits are made in the sophomore, junior, and senior years to replace worn-out uniforms. The overall cost of the uniform should not exceed that which would be incurred in purchasing clothes to attend a civilian college. The uniform deposit requirements are as follows:

Freshman Year	$325.00
Sophomore Year	25.00
Junior Year	None
Senior Year	None

The cost of articles and uniforms issued to the freshmen during the 1953-1954 academic year was as follows:

Initial Issue of Uniforms Covered by First Semester Payment

Quantity	*Article*	*Cost*
1	Blouse, Dress, wool	$ 34.92
1	Blouse, Full Dress, wool	53.46
1	Cap, blue	3.86
1	Cap, white	4.64
1	Coat, Overcoat, wool	44.34
1	Coat, rain	16.50
4	Cuffs, pairs @ $.39	1.56
2	Covers, mattress @ $2.02	4.04

3	Gloves, pairs, dance @ $.48	1.44
6	Gloves, pairs, drill @ $.70	4.20
1	Gloves, pair, leather	2.85
1	Muffler	1.50
1	Shako, with pom pom, chain	11.80
8	Shirts, grey cotton @ 2.56	20.48
2	Shirts, athletic @ $.62	1.24
2	Shorts, athletic @ $.88	1.76
1	Suit, sweat	2.82
8	Trousers, grey cotton @ $3.20	25.60
4	Trousers, White, full dress @ $4.22	16.88
2	Trousers, Dress, wool @ $17.46	34.92
1	Trousers, Full Dress, wool	18.40
	Miscellaneous Items: 1 Belt, waist; 4 Collars; 1 Cover, rain cap; 2 Letters, company; 1 Links, pair, cuff,; 2 Numerals, class; 1 Plate, breast; 1 Plate, waist; Rental, cartridge box or music pouch; supplies; 1 Tag, Name; 1 Tie	5.68
	Total	$313.24
	S. C. Sales Tax	9.40
		$322.69

The above prices were in effect during the 1954-1955 academic year and are subject to changes in accordance with the contract prices at the time of purchase by the cadets. Extra shirts, trousers, or other articles of uniform in excess of the above quantities are not included in the required deposit. Additional deposits should be made if extra shirts, trousers, or other articles of uniform are desired.

An overcoat and white uniform have been approved and may be worn by the cadets. The two articles of uniform are optional and are not required. They may be purchased by depositing with the Quartermaster the cost of the articles. The cost approximately is $62.00 for the overcoat and $13.00 for the white uniform.

The college does not operate a second-hand uniform department, nor can it assume responsibility of assisting in the disposal of uniform items for persons who own them. However, many cadets have been able to purchase used uniforms from former cadets. No used uniforms should be purchased until they have been inspected and approved by the inspecting military officer.

OTHER FEES:

Class Fund. — This fee is optional and is used to defray the expenses of the formal dances, such as the Thanksgiving, Christmas, Spring, and

Graduation Hops. The charge is $15.00 and is payable in installments of $7.50 each semester.

Diploma Fee. — The charge for the diploma is $6.00.

Transcript Fee. — Official transcripts of scholastic records will be furnished upon request. There is no charge for the initial transcript, but a fee of $1.00 is charged on all subsequent ones. Remittances for transcripts should be made payable to the Quartermaster. The payment should accompany the application for the transcript and should be mailed directly to the Registrar.

Laboratory Fee. — A laboratory fee of $7.50 a semester is charged students taking courses involving laboratory work in biology, chemistry, civil engineering, electrical engineering, geology, and physics. The laboratory fee for Physics 203 - 204 is $1.00 per semester. These laboratory fees are used to cover the added expense of supplies and costly equipment used in the teaching of these courses. This fee is not collected directly but is included in the estimated deposit for books and supplies, and is chargeable against the deposit.

A laboratory fee of $5.00 a semester is charged to students of the Junior and Senior classes majoring in Physical Education.

Refunds

The size of the faculty and staff and other commitments of the college are based upon the enrollment at the beginning of the term. The fees collected are used to meet these commitments, many of which continue throughout the year. When cadets withdraw it is necessary, therefore, to retain all fees paid for registration, tuition, student activities, and maintenance. Unused portions of board, service fees, books and uniform deposits will be refunded.

Since the uniform and book deposits are estimated to cover the needs of the cadet for such purchases during the entire academic year, it should not be expected that the school refund this money to the cadet for his personal needs. The unexpended balances of these deposits will be returned upon request in June at the close of the academic year; otherwise, they will be held to the cadet's credit until the next academic year or until he withdraws from The Citadel.

Summary of Expenses of South Carolina Students

Educational Fees:	*Freshmen*	*Sophomores*	*Juniors*	*Seniors*
Registration	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Tuition	80.00	80.00	80.00	80.00
	$ 86.00	$ 86.00	$ 86.00	$ 86.00
Student Activities	$ 51.00	$ 51.00	$ 51.00	$ 51.00

Services and Subsistence:				
Board	$ 432.00	$432.00	$432.00	$432.00
Overhead and Maintenance	8.00	8.00	8.00	8.00
Service Fee	147.00	147.00	147.00	147.00
	$ 587.00	$587.00	$587.00	$587.00
Deposits:				
Breakage	$ 5.00	$	$	$
Books and Supplies	75.00*	75.00	50.00	50.00
Uniforms	325.00	25.00		
	$ 405.00	$100.00	$ 50.00	$ 50.00
Total	$1129.00	$824.00	$774.00	$774.00

* An additional deposit of $40.00 is required of freshmen students who elect engineering drawing.

Summary of Expenses for Out-of-State Students

	Fresh-men	*Sopho-mores*	*Juniors*	*Seniors*
Educational Fees:				
Registration	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Tuition	250.00	250.00	250.00	250.00
	$ 256.00	$256.00	$256.00	$256.00
Student Activities	$ 51.00	$ 51.00	$ 51.00	$ 51.00
Services and Subsistence:				
Board	$ 432.00	$432.00	$432.00	$432.00
Overhead and Maintenance	8.00	8.00	8.00	8.00
Service Fee	147.00	147.00	147.00	147.00
	$ 587.00	$587.00	$587.00	$587.00
Deposits:				
Breakage	$ 5.00	$	$	$
Books and Supplies	75.00*	75.00	50.00	50.00
Uniforms	325.00	25.00		
	$ 405.00	$100.00	$ 50.00	$ 50.00
Total	$1,299.00	$994.00	$944.00	$944.00

* An additional deposit of $40.00 is required of freshmen students who elect engineering drawing.

Schedule of Payments for South Carolina Students

	Freshmen	*Sophomores*	*Juniors*	*Seniors*
First Semester:				
1st Installment - 9/12/55	$ 432.50*	$	$	$
1st Installment - 9/19/55		282.50	232.50	232.50
2nd Installment - 11/15/55	194.50	179.50	179.50	179.50
	$ 627.00	$462.00	$412.00	$412.00
Second Semester:				
1st Installment - 1/30/56	$ 322.50	$182.50	$182.50	$182.50
2nd Installment - 4/1/56	179.50	179.50	179.50	179.50
	$ 502.00	$362.00	$362.00	$362.00
Total Academic Year	$1,129.00	$824.00	$774.00	$774.00

* A supplementary bill of $40.00 will be rendered for freshmen students who elect engineering drawing.

Schedule of Payments for Out-of-State Students

	Freshmen	*Sophomores*	*Juniors*	*Seniors*
First Semester:				
1st Installment - 9/12/55	$ 475.00*	$	$	$
1st Installment - 9/19/56		325.00	275.00	275.00
2nd Installment - 11/15/55	237.00	222.00	222.00	222.00
	$ 712.00	$547.00	$497.00	$497.00
Second Semester:				
1st Installment - 1/30/56	$ 365.00	$225.00	$225.00	$225.00
2nd Installment - 4/1/55	222.00	222.00	222.00	222.00
	$ 587.00	$447.00	$447.00	$447.00
Total Academic Year	$1,299.00	$994.00	$944.00	$944.00

* A supplementary bill of $40.00 will be rendered for freshmen students who elect engineering drawing.

The Class Fund, which is used to defray the cost of the formal dances, has not been added to these figures. This is an optional fee (see page 38) and is payable in payments of $7.50 on the first installment of each semester.

Summary of Estimated Expenses for Four Years

Year	*South Carolina Students*	*Out-of-State Students*
Freshman	$1,129.00	$1,299.00
Sophomore	824.00	994.00
Junior	774.00	944.00
Senior	774.00	944.00
Total Estimated Cost for Four Years	$3,501.00	$4,181.00

R.O.T.C. ALLOWANCES

Students enrolled in Military or Air Science Courses I and II (Basic R.O.T.C.) at the present time are paid by the Federal Government an annual commutation of uniform allowance of $25.00. Students formally enrolled in Military or Air Science Courses III and IV (Advanced R.O.T.C.) at the present time are paid a commutation of uniform allowance of $50.00 each year for two years. These amounts are credited at the end of each semester to the students' Quartermaster accounts upon completion of all the requirements incident to establishing credit for the courses.

In addition to the commutation of uniform allowance those students enrolled in Military or Air Science Courses III and IV are paid a monetary allowance in place of subsistence. The current daily rate in place of subsitence is 90 cents, not to exceed 595 days. This money is paid each month directly to those students enrolled in the Military Science Courses and each calendar quarter to those students enrolled in the Air Science Courses. The amount averages approximately $27.00 a month.

Students formally enrolled in Military or Air Science Courses III and IV are required to attend a six-week summer camp upon completion of Military or Air Science Course III. The student will receive the pay of an Army Private (78.50 a month) while attending camp and travel pay to and from camp at the rate of five cents a mile.

Summary of Estimated R.O.T.C. Allowances

Freshman Year:	
Commutation of Uniform Allowance	$ 25.00
Sophomore Year:	
Commutation of Uniform Allowance	$ 25.00
Junior Year:	
Commutation of Uniform Allowance	$ 50.00
Subsistence Allowance (Estimate)	232.20
	$282.20

Senior Year:	
Commutation of Uniform Allowance	$ 50.00
Subsistence Allowance (Estimate)	288.90
	$338.90
Summer Camp:	
Pay of an Army Private (Six Weeks)	$117.75
Travel - five cents a mile to and from camp	

Additional Information

Unsatisfactory Accounts. — When a cadet's account is in an unsatisfactory condition, no honorable discharge will be made, no diploma will be awarded, and no transcript of credits will be provided until a satisfactory settlement of the account has been made.

Pocket Money. — The college does not handle pocket money accounts. All allowances for pocket money should be sent directly to the cadet. No estimate is made of this requirement, for the amount varies among the cadets and can best be determined by the cadet and parents. Dry cleaning, laundering of the white uniform, hair cuts, and travel must be paid for out of the cadet's pocket money.

If the cadet receives a substantial allowance for his personal needs, he may deposit it with the College Hostess, who runs a depository for the accommodation of the cadets, or it may be deposited in a special checking account with a local bank.

Clothing and Bedding

All cadets are required to furnish their own bed clothes. Beds and mattresses are provided by the college, but pillows are not. Two mattress covers will be issued at cost to each cadet. Cadets must come provided with the following articles:

Three pajamas
One bathrobe
Ten tee shirts and 10 short drawers
Twelve pairs of black socks
Twelve handkerchiefs
One pair bedroom slippers
Two pairs black shoes (with rubber heels)
Six towels
One pillow
Three pillow cases
Four sheets for single bed
Three blankets for single bed
Twelve coat hangers
Two large laundry bags
Toilet articles

New cadets are advised to break in their cadet uniform shoes at least three weeks prior to reporting to The Citadel.

Before the opening of the session, a new cadet is assigned a laundry number, which he retains as long as he remains at The Citadel. Cloth-

ing should be marked with the name and full initials, as well as with laundry number, as follows: Sheets, towels, and handkerchiefs, in the corner; pillow cases, in the corner at open end; collars, on inside near center; shirts, on bands at back of neck; socks, on leg near top; other articles, where most practicable.

Accommodations for Cadets During Holidays

Cadets who cannot go to their homes during the Christmas and Easter holidays may remain on the campus and occupy the visiting teams' dormitory. The barracks and the dining hall will be closed during vacations.

Employment

The time of a cadet at The Citadel is very largely taken up with his duties; hence there is no opportunity for employment either within the college or outside for the purpose of financial assistance.

Hospital

The hospital facilities at The Citadel are excellent, and all ordinary cases of sickness are treated by the surgeon and nurses of the college without expense to the parent. Surgical cases requiring the removal of a cadet to an infirmary in the city, services of a special nurse in the college hospital, and special treatment of eyes, ears, teeth, etc., must be at the expense of the parents or guardian.

SUMMER SESSION

A summer session is conducted for students who wish to accelerate their work or make up conditions.

The summer session must be self-supporting, and the same fees must be charged to both South Carolina and out-of-state students. Fees for the summer session are as follows:

Educational:	
Registration	$ 2.00
Tuition ($9.00 a credit hour of work)	
Student Activities	5.50
Services:	
Board (Subject to change)	150.00
Room (Subject to change)	48.00
Hospital Fee	5.00
Library Fee	2.00
Maintenance Fee	5.00
Deposits:	
Books and Supplies	15.00

It is pointed out that bills for the summer session will not be sent to the parents by the Quartermaster. It is impossible for the Quarter-

master to compute these bills since the tuition fee is based on the number of credit hours of work which is scheduled by the student. The student should come prepared with sufficient cash to take care of his fees for the summer session.

CIVILIAN STUDENTS

Civilian students are made up of veterans under Public Law 550, Public Law 346, veterans whose eligibility has expired, and certain classes of special students. These students are not required to enroll as cadets or to live on the campus.

It is pointed out to the veterans under Public Law 550 that there is an interim period before their checks are received from the Veterans Administration and that they should make arrangements to have sufficient funds to pay the first installments of each semester. Civilian students will be required to pay the fees on the dates as indicated in the following schedule. A student will not be permitted to register at the beginning of each semester if the first installment of the college fees is not paid. If the second installment of college fees of each semester is not paid on the date indicated, the student is subject to having his enrollment in the college cancelled.

Summary of Expenses of Civilian Students

	South Carolina Students		Out-of-State Students	
Educational Fees:	Freshmen	Upper Classmen	Freshmen	Upper Classmen
Registration	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Tuition	80.00	80.00	250.00	250.00
	$ 86.00	$ 86.00	$256.00	$256.00
Student Activities	$ 51.00	$ 51.00	$ 51.00	$ 51.00
Service Fees:				
Library Fee	$ 6.00	$ 6.00	$ 6.00	$ 6.00
Overhead & Maintenance	8.00	8.00	8.00	8.00
Medical Fee	15.00	15.00	15.00	15.00
	$ 29.00	$ 29.00	$ 29.00	$ 29.00
Deposits:				
Books, Laboratory fees, Supplies, etc.*	$ 75.00	$ 50.00	$ 75.00	$ 50.00
Total	$241.00	$216.00	$411.00	$386.00

* An additional deposit of $40.00 is required of those students who elect engineering drawing.

Schedule of Payments

First Semester:	South Carolina Students		Out-of-State Students	
	Freshmen	Upper Classmen	Freshmen	Upper Classmen
1st Installment - 9/19/55*	$ 73.00	$ 73.00	$115.50	$115.50
2nd Installment - 11/15/55	60.00	40.00	102.50	82.50
Total First Semester	$133.00	$113.00	$218.00	$198.00
Second Semester:				
1st Installment - 1/30/56	$ 68.00	$ 63.00	$110.50	$105.50
2nd Installment - 4/1/56	40.00	40.00	82.50	82.50
Total Second Semester	$108.00	$103.00	$193.00	$188.00
Total Academic Year	$241.00	$216.00	$411.00	$386.00

* A supplementary bill of $40.00 will be rendered for those students who elect engineering drawing.

Scholarships

Charleston City Scholarships

There are six scholarships maintained by the City of Charleston. Each of these is worth $250.00 a year. Appointments are made by the Committee on Ways and Means of the City Council on the basis of competitive examination. Applicants must be residents of the City of Charleston.

The First Field Artillery Brigade, A.E.F., Scholarship. — Covering all expenses at The Citadel for four years; established in 1934 by Colonel Robert R. McCormick of Chicago, Ill. Limited to candidates from the State of Illinois. Qualifications:

1. Financial need.
2. Superior scholastic record.
3. General worth and personality as indicated by qualities of manhood, truth, courage, devotion to duty, and unselfishness.
4. Exhibition of moral force of character and qualities of leadership.
5. Physical vigor as shown by participation in manly sports.

Holder: H. R. Tear, Evanston, Ill. Vacant 1958

The Fifth Field Artillery Scholarship. — Covering all expenses at The Citadel for four years; established in 1934 by Colonel Robert R. McCormick of Chicago, Ill. Limited to candidates from the State of Illinois. Qualifications the same as for the First Field Artillery Brigade Scholarship.

Holder: R. J. Hennelly, Jr., Oak Park, Ill. Vacant 1956

Baruch Scholarships. — Two scholarships with a value of $250.00 each have been inaugurated from the income of a fund donated to The Citadel by Mr. Bernard Baruch.

Present Holders: R. G. Johnson, Charleston, S. C. Vacant 1955
G. A. Patterson, Wilmington, N. C. Vacant 1955

Bond Scholarship. — Supported by the income from a Trust Fund established by alumni as a memorial to the late Colonel Oliver J. Bond. Present value $150.00 a year for four years.

Holder: J. W. Adams, Jr., Greenwood, S. C. Vacant 1957

The James R. Crouch Scholarship. — The income from $5,000.00 in bonds; founded in 1925 by the late James R. Crouch of Greenville, S. C.

Holder: W. S. Othersen, Charleston, S. C. Vacant 1955

Robert Wyche Goggans Memorial Scholarship. — A $500.00 scholarship in memory of Robert Wyche Goggans, Class of 1946.

Holder: T. W. G. Solomons, McClellanville, S. C. Vacant 1955

The William States Lee Scholarship. — The income from $6,000.00 in bonds; founded in 1925 by the late William States Lee of Charlotte, N. C.

Holder: John H. Huff, Greenville, S. C. Vacant 1956

Star of the West Scholarship I. — This scholarship, awarded for the first time in 1952, covers all college expenses and is supported by the income from an anonymous Trust Fund. The scholarship is available only to students of outstanding ability and attainment without reference to financial need.

Awarded to: W. H. Rudnick, Sullivans Island, S. C. Vacant 1956

Star of the West Scholarship II. — A second award from the same Trust Fund as the first Star of the West Scholarship. It pays all college expenses and is given in recognition of outstanding ability and attainment.

Awarded to: C. E. Watts, III. Vacant 1958

Academic Honors and Awards

The Scholarhsip Medal. — Presented annually by the Board of Visitors to the cadet graduating at the head of his class.

General High Honors. — Awarded to those cadets of the graduating class whose academic standing in each of the four college years does not fall below a grade point ratio of 3.67.

General Honors. — Awarded to those cadets of the graduating class who have maintained a grade point ratio of 3.50 to 3.66 during the four college years.

Departmental Honors. — Awarded on recommendation of heads of departments to those cadets of the graduating class who have established a grade point ratio of 3.50 or better in at least 36 semester hours work in a department, including all departmental work in the junior and senior years.

The Gold Star. — Awarded to those cadets who have made a grade point ratio of not less than 3.67 in the work of a semester. The star is worn on the collar of the uniform during the next semester.

The Citadel Honorary Society. — Membership in The Citadel Honorary Society is limited to members of the 1st class whose standing is in the upper eight per cent of their class.

The European Citadel Association Award. — A handsome silver cup awarded annually for one year to the company of cadets which makes the greatest improvement in scholastic work during the college year.

The Francis Marion Cup. — Awarded by the Rebecca Motte Chapter, D.A.R., to a cadet of the June graduating class for outstanding achievement in American History.

Military Honors and Awards

R.O.T.C. Distinguished Military Student Program — Students whose proficiency in Military Training and whose qualities of leadership and attention to duty have merited the approbation of the Professor of Military Science and Tactics are designated Distinguished Military Students. Upon graduation Distinguished Military Students are designated

Distinguished Military Graduates. Distinguished Military Students are eligible to apply for appointment as Second Lieutenant in the Regular Army when they have registered for their last academic year. Application may be submitted at any time within six months subsequent to graduation.

Distinguished Air Force Reserve Officers Training Corps (AFROTC) Students and Graduates. — The Professor of Air Science and Tactics (PAST) may appoint as Distinguished AFROTC Students at the start of the second year advanced ROTC course students who have distinguished themselves by displaying outstanding qualities of leadership. adaptability to military training and academic ability. Students thus selected and appointed may be appointed Distinguished AFROTC Graduates upon graduation provided they have continued to display essential qualities. After serving on active military duty for eighteen months, Distinguished AFROTC Graduates may apply for an appointment in the Regular Air Force and will receive special consideration for a Regular commission.

The 103rd Field Artillery Award. — Established by the veteran organization of that regiment as a trophy to be won each year by the company of cadets which has attained the best record in discipline.

The Anti-Aircraft Artillery Association Medal. — Awarded by the Anti-Aircraft Aritllery Association to the outstanding Artillery R.O.T.C. enrollee of the second class.

The Air Force Association Medal. — Presented each year to the outstanding First Class AFROTC Cadet based on the recommendation of the PAST.

The Armed Forces Chemical Association Award. — Awarded annually to a First Class AFROTC Cadet for outstanding achievements and scholastic attainments in the field of Air Science and Chemistry studies.

The American Ordnance Association Medal. — Donated by the American Ordnance Association and awarded annually to the outstanding Second Class Cadet in the Ordnance R.O.T.C. Unit.

The Charleston Chapter of the Reserve Officers' Association Saber — Awarded annually by The Charleston Chapter of the Reserve Officers' Association to that member of the first class who has shown the most improvement in leadership and discipline during his senior year.

**The Commandant's Cup.* — Presented to The Citadel by the late Lieutenant Colonel W. C. Miller; awarded annually for one year to the best drilled company.

The Society of American Military Engineers presents medals each year to both the outstanding senior and outstanding junior of the Corps of Engineers R.O.T.C.

The United States Army Infantry Medal. — Donated by the *Combat Forces Journal* and awarded annually to the outstanding Second Class Cadet in the Infantry R.O.T.C. Unit.

The Washington Light Infantry Marksmanship Trophy and Medals. — A trophy awarded annually for one year to the organization whose team makes the highest score in small-bore rifle marksmanships; silver medals awarded to the members of the winning team and a gold medal to the cadet making the highest individual score; all presented by the Washington Light Infantry.

Robert O. Purdy Award. — An award of $100.00 given annually to the member of the graduating class in the Artillery who has made the best record in academic studies and in military achievement during his four years as a cadet. Named in honor of Robert O. Purdy of Sumter, S. C., who gave his life as a member of the First Division, A.E.F., in World War I.

The Wade Hampton Saber. — Awarded annually by the South Carolina Division, U.D.C., to the member of the first class who has attained the highest standing in Military Science and Tactics.

**The Star of the West Medal.* — Originally presented to The Citadel by Dr. B. H. Teague; awarded annually for one year to the best drilled cadet.

**The W. C. White Medal.* — Presented annually by Mrs. W. C. White to the captain of the best drilled company.

General Honors and Awards

The Carlisle Norwood Hastie Award. — Awarded to a member of the graduating class whom his classmates elect as having shown the most tact, consideration, and courtesy to his fellow students.

The Algernon Sydney Sullivan Awards. — Bronze medallions presented by the college, through the benefaction of the New York Southern Society, to students or others in recognition of high thought and noble endeavor; established by that Society in 1925, the awards have been made at The Citadel since 1933.

The John O. Willson Ring. — The bequest of Dr. John O. Willson, given annually to the member of the first class voted by his classmates the manliest, purest, and most courteous member of his class.

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*The competitions for the Star of the West Medal, the W. C. White Medal, and the Commandant's Cup are held as part of the annual commencement exercises.

The Objectives of The Citadel

The objectives of The Military College of South Carolina are to offer such courses in the liberal arts and sciences as will develop the mind and character of the student, increase his likelihood of success in any useful pursuit, and fit him to discharge the duties of citizenship; to give to students who so desire professional training in Civil Engineering, Electrical Engineering, and Business Administration; to see that its graduates are adequately equipped in their respective fields of concentration to enter in full standing post-graduate, professional, or technical schools; and to qualify them for commissions in the Officers' Reserve Corps of the Armed Forces.

Courses

The course of study is essentially the same for all freshmen. Certain subjects are required in the sophomore year of all students, the remaining subjects being determined by the course which the student is to follow during his junior and senior years. Major work is offered in the following departments: Business Administration, Chemistry, Civil Engineering, Education, Electrical Engineering, English, History, Mathematics, Modern Languages, Physics, and Political Science. Thorough pre-medical and pre-dental courses are available and also a course in physical education.

A statement of the courses required each year in each department and a detailed description of the various courses will be found in the pages immediately following.

Grades

A, B, C, and D are passing grades. F represents failure. I represents work of a satisfactory character incomplete for acceptable reasons.

Grade reports are mailed to parents or guardians at the end of each semester. At the middle of each semester, reports are sent to parents of cadets who are deficient at that time.

Changes in schedule must be effected during the first ten days of the term. A subject dropped after the first ten days have passed will receive a grade of F.

Promotions

No student will be promoted who has a grade of F in more than two semester courses. To be classified as a third classman a student must have credit for at least twenty-six (26) semester hours and have accumulated a minimum of thirty-four (34) quality points. For advancement from the third to second class a student must have credit for at least sixty-four (64) semester hours and have accumulated a minimum of one hundred (100) quality points. For promotion to the first class a student must be able to graduate within two semesters

from the date of promotion and have accumulated a minimum of one hundred ninety (190) quality points.

For purposes of ascertaining quality points and/or grade point ratio (GPR), to determine class standing or promotion, grades shall be weighted as follows: A, 4 points per semester hour; B, 3 points; C, 2 points; D, 1 point; F, zero points. The total of the weighted grades divided by the total credit hours taken by the student is the grade point ration (GPR).

Any full-time student who fails to achieve the following minimum requirements shall be reported to the Academic Board for action as to continuance in college:

(a) at least 14 semester hours credit in the twelve-month period after entrance,
(b) at least 18 semester hours credit and 27 quality points in the second twelve-month period,
(c) at least 21 semester hours credit and 32 quality points in each succeding twelve-month period.

The Registrar shall notify in June all students who have failed to meet the minimum standards that they must make up their deficiencies in summer school in order to be eligible to continue at The Citadel in September.

Any student who is required to withdraw from The Citadel for academic reasons may request from the President permission to reenter. The earliest time a reentrance will be made will be one semester after his withdrawal.

Requirements for Graduation

For graduation a student must have completed satisfactorily one of the courses of study outlined in the catalogue and must have accumulated a minimum of 280 quality points.

It is also a requisite for graduation that every senior prepare a senior essay on a subject chosen from his field of concentration. This essay is designed as an exercise in the preparation of a formal research paper, measuring up to commonly accepted professional standards and is wholly apart from the requirements of a particular course in the curriculum. The writing of the senior essay shall be done in residence.

For the sake of uniformity it is recommended that the subject of the senior essay be selected in all departments not later than eight weeks after the opening of college and that the preliminary draft be submitted not more than twenty weeks after the opening of college. The final date for approval of the senior essay shall be two weeks before Commencement.

In addition to the formal credits required for graduation, the candidate must have demonstrated that he is of high character and worthy to receive the diploma of the college. Recommendations for graduation

are made by the Academic Board to the Board of Visitors, who in turn award the diplomas.

Degrees

The degree of Bachelor of Arts is conferred upon satisfactory completion of the English, History, Modern Language, Political Science, and classical programs of study. The degree of Bachelor of Science is conferred upon satisfactory completion of the Chemistry, Mathematics, Physics, Education, Physical Education, and Pre-Medical programs.

The degree of Bachelor of Science in Commerce is awarded to students who complete satisfactorily the course in Business Administration.

Graduates in Civil Engineering receive the degree of Bachelor of Science in Civil Engineering. Graduates in Electrical Engineering receive the degree of Bachelor of Science in Electrical Engineering.

The degree of Civil Engineer is conferred as a professional degree upon graduates in Civil Engineering after at least three years of responsible work in their profession and the submission of a satisfactory thesis on some engineering subject.

Classification of Cadets

The cadets are arranged in four distinct classes, corresponding with the four years of study. Cadets pursuing the first year's course constitute the Fourth or Freshman Class; those taking the second year's course, the Third of Sophomore Class; those in the third year's course, the Second or Junior Class; and those in the fourth year's course, the First or Senior Class.

Courses of Study

In the following pages will be found a detailed schedule of the curriculum required for each degree according to the major subject elected. The clock hours and the credit value of each course are noted. The individual courses are described under the appropriate departmental heading in the pages following the schedules.

The Biology and Geology courses are given in the Department of Chemistry; the Drawing, in the Department of Civil Engineering; the Psychology, Philosophy, and Sociology, in the Department of Education.

The courses of the fourth class are numbered from 101 upward, of the third class from 201 upward, of the second class from 301 upward, and of the first class from 401 upward.

Greater Issues Course

The Greater Issues Course is part of the curriculum for all cadets. In this course leaders of national reputation come to The Citadel and speak with the student body about the greater issues of America today. Each speaker customarily discusses some issue with which he is particularly familiar and then answers questions of the cadets from the

floor. The Greater Issues Course was inaugurated last year by General Mark W. Clark, president of The Citadel. Among the speakers for the first year of the course were General Matthew B. Ridgway, Chief of Staff of the Army; Senator William F. Knowland of California; Admiral Robert B. Carney, Chief of Naval Operations of the United States Navy; Rear Admiral Jerauld Wright, Commander-in-Chief Atlantic Fleet; Francis Cardinal Spellman, Roman Catholic Archbishop of New York; Henry J. Taylor, General Motors news analyst on CBS radio network; Dr. Karl Gruber, Austrian Amabassador to the United States; Lowell Thomas, noted CBS news analyst and writer; and General T. D. White, Vice Chief of Staff, United States Air Force. This course will be presented each year at The Citadel.

BUSINESS ADMINISTRATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101, 102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
Economic Origins and Principles	B. Ad. 201	18	3	0	3	
Economic Principles and Problems	B. Ad. 202	18	3	0	3	
Raw Material Wealth	B. Ad. 203	18	3	0	3	
Business Psychology	B. Ad. 204	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	36
SECOND CLASS						
Accounting Principles and Practices	B. Ad. 303	18	2	2	3	
Advanced Accounting Theory and Practice	B. Ad. 304	18	2	2	3	
Business Law	B. Ad. 305	18	3	0	3	
Business Organization	B. Ad. 306	18	3	0	3	
Principles of Labor	B. Ad. 307	18	3	0	3	
General Insurance	B. Ad. 308	18	3	0	3	
Marketing	B. Ad. 309	18	3	0	3	
Foreign Trade	B. Ad. 310	18	3	0	3	
Government Finance	B. Ad. 311	18	3	0	3	
Taxation	B. Ad. 312	18	3	0	3	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
Industrial Accounting	B. Ad. 401	18	2	2	3	
Adv. Accounting Problems	B. Ad. 402	18	2	2	3	
Corporation Finance	B. Ad. 403	18	3	0	3	
Investments	B. Ad. 404	18	3	0	3	
Sales Administration	B. Ad. 405	18	3	0	3	
Transportation	B. Ad. 406	18	3	0	3	
Money	B. Ad. 407	18	3	0	3	
Banking	B. Ad. 408	18	3	0	3	

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
Personnel Management	B. Ad. 409	18	3	0	3	
Production	B. Ad. 410	18	3	0	3	
Senior Essay	B. Ad. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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CHEMISTRY MAJOR

FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
Mathematical Analysis	Math. 101,102	36	5	0	10	
Survey of American History	Hist. 101,102	36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
The Calculus	Math. 201,202	36	5	0	10	
Qualitative Analysis	Chem. 201,202	36	2	3	6	
Elementary German	Ger. 101,102	36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	40
SECOND CLASS						
Quantitative Analysis	Chem. 301,302	36	2	4	8	
Organic Chemistry	Chem. 303,304	36	3	3	8	
Scientific German	Ger. 201,202	36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	40
FIRST CLASS						
Physical Chemistry	Chem. 401,402	36	3	3	8	
Adv. Topics in Organic Chemistry	Chem. 403,404	36	3	0	6	
Advanced Quantitative Analysis	Chem. 407	18	2	4	4	
Qualitative Organic Chemistry	Chem. 408	18	2	4	4	
Organic Preparations	Chem. 409	18	1	4	3	
Elective		18	3	0	3	
Senior Essay	Chem. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	36
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CIVIL ENGINEERING

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
Mathematical Analysis	Math. 101,102	36	5	0	10	
Drawing & Descriptive Geometry	C.E. 101,102	36	2	4	8	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
The Calculus	Math. 201,202	36	5	0	10	
Engineering Drawing	C.E. 201	18	0	4	2	
Analytic Mechanics and Graphic Statics	C.E. 202	18	2	2	3	
Photogrammetry	C.E. 204	18	0	2	1	
Surveying	C.E. 205,206	36	3	2	8	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	42
SECOND CLASS						
Differential Equations or	Math. 301,302	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0		
Analytic Mechanics	C.E. 301	18	4	0	4	
Mechanics of Materials	C.E. 303,304	36	3	0	6	
Highway Engineering	C.E. 305	18	2	2	3	
Highway Engineering	C.E. 306	18	3	0	3	
Materials Laboratory	C.E. 307	18	0	4	2	
Stress Analysis	C.E. 308	18	2	2	3	
Engineering Law	C.E. 310	18	3	0	3	
Engineering Geology	Geol. 303	18	3	2	4	
Electrical Engineering	E.E. 306	18	3	2	4	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	44
FIRST CLASS						
Concrete Laboratory	C.E. 401	18	1	2	2	
Soils Laboratory	C.E. 402	18	1	2	2	
Reinforced Concrete	C.E. 403,404	36	3	0	6	
Steel Theory and Design	C.E. 405,406	36	3	2	8	
Hydraulics	C.E. 407	18	3	2	4	
Water Supply & Sewerage	C.E. 408	18	3	0	3	
Soils and Foundations	C.E. 409,410	36	3	0	6	
Senior Essay	C.E. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	39
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EDUCATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 103, 104	36	4	0	6	
or	Engl. 101, 102	36	3	0		
General Chemistry	Chem. 103, 104	36	2	3	6	
General Mathematics	Math. 103, 104	36	3	0	6	
Survey of American History	Hist. 101, 102	36	3	0	6	
Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101, 102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201, 202	36	3	0	6	
Introduction to College Physics	Phys. 203, 204	36	3	2	8	
Modern Language or Elective		36	3	0	6	
Educational Psychology	Psy. 201, 202	36	3	0	6	
*Social Science		18	3	0	3	
Major Elective		36	3	0	6	
2nd Year Basic R.O.T.C.	201, 202	36	2	4	4	39
SECOND CLASS						
Principles and Problems of Secondary Education	Ed. 307, 308	36	3	0	6	
Health Education	Ph. Ed. 301	18	3	0	3	
Art Appreciation	Art. 306	18	3	0	3	
Music Appreciation	Art 305	18	3	0	3	
Guidance	Ed. 411	18	3	0	3	
Public Speaking	Engl. 205	18	3	0	3	
General Biology	Biol. 203, 204	36	3	0	6	
Major Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301, 302	36	4	4	6	39
FIRST CLASS						
Methods and Materials of Secondary School Teaching	Ed. 401, 402	36	3	0	6	
Directed Teaching	Ed. 400	18	0	6	6	
Seminar in Secondary Education	Ed. 403	18	3	0	3	
Audio-Vsual Aids	Ed. 407	18	3	0	3	
*Social Science		18	3	0	3	
Major Elective		36	3	0	6	
Senior Essay	Ed. 420				2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	35
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* The two Social Science courses must be in different fields.

ELECTRICAL ENGINEERING

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
Mathematical Analysis	Math. 101,102	36	5	0	10	
Drawing & Descriptive Geometry	C.E. 101,102	36	2	4	8	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
The Calculus	Math. 201,202	36	5	0	10	
Engineering Drawing	C.E. 201	18	0	4	2	
Introduction to Electrical Engr.	E.E. 202	18	3	0	3	
Surveying	C.E. 205,206	36	3	2	8	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	41
SECOND CLASS						
Differential Equations	Math. 301,302	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
Advanced General Physics	Phys. 301,302	36	5	0	10	
D. C. Circuits & Machines	E.E. 301	18	5	0	5	
D. C. Machines, Laboratory	E.E. 303	18	0	4	2	
A. C. Circuits & Machines	E.E. 302	18	5	0	5	
A. C. Machines, Laboratory	E.E. 304	18	0	4	2	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	42
FIRST CLASS						
Electronics	E.E. 401,402	36	5	0	10	
Electronics Laboratory	E.E. 403,404	36	0	4	4	
Electrical Measurements	E.E. 405	18	3	0	3	
Electrical Measurements Lab.	E.E. 407	18	0	4	2	
Heat Engines	E.E. 409	18	3	0	3	
Advanced A. C. Theory	E.E. 411	18	3	0	3	
Transmission Lines	E.E. 408	18	3	0	3	
Power Plant Engr. & Design	E.E. 410	18	3	0	3	
Public Speaking	Engl. 205	18	3	0	3	
Senior Essay	E.E. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	42
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ENGLISH MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Intro. to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
The English Language	Engl. 203,204	36	3	0	6	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	36
SECOND CLASS						
English Course *		36	3	0	6	
English Course *		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
English Course *		36	3	0	6	
English Course *		36	3	0	6	
English Course *		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Engl. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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*See page 100 for detailed statement regarding courses in junior and senior years.

HISTORY MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Mathematics	Math. 103,104	36	3	0	6	
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
American National Government	Polit. 201	18	3	0	3	
State & Local Government	Polit. 202	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	36
SECOND CLASS						
History of England	Hist. 301,302	36	3	0	6	
United States since 1900, or	Hist. 303,304	36	3	0	6	
Europe since 1870	Hist. 305,306	36	3	0		
Economic Foundations of Mod. Life	Polit. 307,308	36	3	0	6	
A One-Semester History Course		18	3	0	3	
Elective		18	3	0	3	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
American Diplomatic History, or	Hist. 401,402	36	3	0	6	
Latin American History, or	Hist. 403,404	36	3	0		
The Far East	Hist. 409,410	36	3	0		
Colonial America, or	Hist. 405,406	36	3	0	6	
The Ancient World	Hist. 47,408	36	3	0		
International Politics, or	Polit. 405,406	36	3	0	6	
American Constitution	Polit. 401,402	36	3	0		
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Hist. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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MATHEMATICS MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
or	Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
Mathematical Analysis	Math. 101,102	36	5	0	10	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
The Calculus	Math. 201,202	36	5	0	10	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	40
SECOND CLASS						
Differential Equations	Math. 301,302	36	3	0	6	
Advanced Mathematics		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
Advanced Mathematics		36	3	0	6	
Advanced Mathematics		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Math. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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MODERN LANGUAGE MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
or	Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
French — Elemen. or Intermediate		36	3	0	6	
Spanish or German		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	36
SECOND CLASS						
Intermediate French, or	Fren. 201,202	36	3	0	6	
Survey of French Literature)	Fren. 301,302	36	3	0		
Inter. or Advanced Spanish, or)		36	3	0	6	
Inter. or Advanced German)		36	3	0		
French Composition and Conversation, or	Fren. 401,402	36	3	0	6	
An Additional Course in Spanish or German		36	3	0		
Elective		36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
Advanced French		36	3	0	6	
German Literature, 19th Century, or	Ger. 301,302	36	3	0	6	
Faust, or	Ger. 401,402	36	3	0		
Spanish Literature of Golden Age, or	Span. 301,302	36	3	0		
Spanish-American Literature	Span. 303,304	36	3	0		
Elective		36	3	0	6	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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PHYSICAL EDUCATION MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
or	Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101, 104	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C	101, 102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201, 202	36	3	0	6	
Introduction to College Physics	Phys. 203, 204	36	3	2	8	
General Biology	Biol. 203, 204	36	3	0	6	
Introduction to Physical Education	Ph. Ed. 201	18	3	0	3	
Educational Psychology	Psy. 201	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C		36	3	4	4	36
SECOND CLASS						
Principles and Problems of Secondary Education	Ed. 307, 308	36	3	0	6	
Anatomy	Biol. 303	18	3	0	3	
Physiology	Biol. 304	18	3	0	3	
Health Education	Ph. Ed. 301	18	3	0	3	
Baseball	Ph. Ed. 302	18	0	2	1	
Track	Ph. Ed. 308	18	0	2	1	
Basketball	Ph. Ed. 303	18	0	2	1	
Tennis	Ph. Ed. 304	18	0	2	1	
Gymnastics, etc	Ph. Ed. 307	18	0	4	2	
Music Appreciation	Art 305	18	3	0	3	
Art Appreciation	Art 306	18	3	0	3	
Intramural Sports	Ph. Ed. 305,306	36	0	1	1	
1st Year Advanced R.O.T.C	301, 302	36	4	4	6	34
FIRST CLASS						
Organization and Administration of Physical Education	Ed. 401	18	3	0	3	
Football	Ph. Ed. 402	18	3	0	3	
Individual Physical Education	Ph. Ed. 403	18	3	0	3	
Methods of Teaching Physical Education	Ph. Ed. 404	18	3	0	3	
Methods and Materials of Secondary School Teaching	Ed. 401	18	3	0	3	
American National Government	Polit. 201	18	3	0	3	
Introduction to Sociology	Soc. 301	18	3	0	3	
Directed Teaching	Ed. 400	18			6	
European Civilization Since 1500	Hist. 201, 202	36	3	0	6	
Senior Essay	Ph. Ed. 420	18			2	
2nd Year Advanced R.O.T.C	401, 402	36	4	4	6	41
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PHYSICS MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0]	6	
	or Engl. 103,104	36	4	0]		
General Chemistry	Chem. 101,102	36	3	2	8	
Mathematical Analysis	Math. 101,102	36	5	0	10	
German, or	Ger. 101,102	36	3	0)	6	
Drawing and Descr. Geometry	C. E. 101,102	36	2	4)	(8)	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
						(36)
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
The Calculus	Math. 201,202	36	5	0	10	
Survey of American History	Hist. 101,102	36	3	0	6	
Scientific German	Ger. 201,202	36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	40
SECOND CLASS						
Differential Equations	Math. 301,302	36	3	0	6	
Advanced General Physics	Phys. 301,302	36	5	0	10	
Laboratory Physics	Phys. 303,304	36	0	4	4	
Wave Motion, Sound and Geometrical Optics	Phys. 307	18	3	2	4	
Light	Phys. 308	18	3	2	4	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	40
FIRST CLASS						
Advanced Physics	Phys. 401	18	3	0	3	
Modern Physics	Phys. 402	18	3	0	3	
Adv. Laboratory Physics	Phys. 403,404	36	0	2	2	
Electrical Engineering	E.E. 413	18	5	4	7	
Electronics	E.E. 406	18	3	2	4	
Elective		36	3	0	6	
Elective		36	3	0	6	
Senior Essay	Phys. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	39
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						(155)

POLITICAL SCIENCE MAJOR

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
or	Engl. 103,104	36	4	0		
Introduction to General Chemistry	Chem. 103,104	36	2	3	6	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	34
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Introduction to College Physics	Phys. 203,204	36	3	2	8	
European Civilization since 1500	Hist. 201,202	36	3	0	6	
American National Government	Polit. 201	18	3	0	3	
State & Local Government	Polit. 202	18	3	0	3	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	36
SECOND CLASS						
International Law & Organization	Polit. 301,302	36	3	0	6	
American Foreign Relations	Polit. 303	18	3	0	3	
American Parties & Politics	Polit. 304	18	3	0	3	
Public Administration	Polit. 305,306	36	3	0	6	
Econ. Foundations of Modern Life	Polit. 307,308	36	3	0	6	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	36
FIRST CLASS						
The American Constitution	Polit. 401,402	36	3	0	6	
Government Finance	Polit. 403	18	3	0	3	
International Politics	Polit. 405,406	36	3	0	6	
Political Theory	Polit. 407,408	36	3	0	6	
Elective		36	3	0	6	
Elective		18	3	0	3	
Senior Essay	Polit. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	38
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PRE-DENTAL COURSE

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
A Modern Language		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
Organic Chemistry	Chem. 303,304	36	3	3	8	
Elementary Zoology	Biol. 201,202	36	2	4	8	
A Modern Language		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	40

Students studying for a B.S. degree will take the courses outlined in the Pre-Medical curriculum.

PRE-MEDICAL COURSE

Subject	Course No.	No. of Weeks	Clock Hrs. a week Rec.	Clock Hrs. a week Lab.	Sem. Hr. Credits	Total
FOURTH CLASS						
Composition and Literature	Engl. 101,102	36	3	0	6	
	or Engl. 103,104	36	4	0		
General Chemistry	Chem. 101,102	36	3	2	8	
General Mathematics	Math. 103,104	36	3	0	6	
Survey of American History	Hist. 101,102	36	3	0	6	
German or French		36	3	0	6	
1st Year Basic R.O.T.C.	101,102	36	2	4	4	36
THIRD CLASS						
Survey of English Literature	Engl. 201,202	36	3	0	6	
Elementary College Physics	Phys. 201,202	36	3	2	8	
Qualitative Analysis	Chem. 201,202	36	2	3	6	
Elementary Zoology	Biol. 201,202	36	2	4	8	
German or French		36	3	0	6	
2nd Year Basic R.O.T.C.	201,202	36	2	4	4	38
SECOND CLASS						
Comparative Anatomy	Biol. 301,302	36	2	4	8	
Organic Chemistry	Chem. 303,304	36	3	3	8	
Laboratory Physics	Phys. 305,306	36	2	2	6	
General Psychology	Psych. 303	18	3	0	3	
Abnormal Psychology	Psych. 304	18	3	0	3	
Elective		36	3	0	6	
1st Year Advanced R.O.T.C.	301,302	36	4	4	6	40
FIRST CLASS						
Embryology	Biol. 401	18	2	4	4	
Histology	Biol. 402	18	2	2	3	
Volumetric Analysis	Chem. 301	18	2	4	4	
Adv. Topics in Organic Chemistry	Chem. 403,404	36	3	0	6	
Adv. Inorganic Chemistry	Chem. 405	18	3	0	3	
Physical Chemistry for Pre-Meds	Chem. 406	18	3	0	3	
Elective		36	3	0	6	
Senior Essay	Chem. 420	18			2	
2nd Year Advanced R.O.T.C.	401,402	36	4	4	6	37
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The Citadel requires all cadets to satisfactorily complete the four year course of instruction of the Senior Division, ROTC. Cadets who are physically qualified and are formally enrolled in the AFROTC Program may be commissioned as Second Lieutenants in the Air Force Reserve upon successful completion of the entire AFROTC course of instruction and receipt of a baccalaureate degree.

The mission of the AFROTC is to select and prepare students, through a permanent program of instruction at civilian educational institutions, to serve as officers in the Regular or Reserve components of the United States Air Force, and to assist in discharging, where necessary, any institutional obligation to offer instruction in military training.

The AFROTC course of instruction consists of two parts, the basic course consisting of the first two years of Air Science and corresponding to the freshman and sophomore years in the academic departments of The Citadel, and the advanced course consisting of the last two years of Air Science pursued concurrently with the junior and senior academic years. Attendance at a summer training camp of six weeks' intensive applicatory training in general and specialized military and Air Force subjects is required, normally between the junior and senior years.

A cadet may be admitted to the AFROTC Program with advanced standing subject to the approval of the PAS and the institutional authorities if he furnishes satisfactory evidence of completion of portions of the course of instruction at another institution. Students who have entered Army ROTC at another institution can only be accepted into the ARFOTC Program if transfer is approved by the PMST. Veterans honorably discharged from the armed forces may be admitted with advanced standing as determined by the PAS.

All AFROTC graduates are eligible to participate in the Air Force flying training and other technical programs in grade, provided they meet the required standards and pass the aptitudinal qualifications in each case. In the foreseeable future, the large majority of AFROTC enrollment will be filled by cadets who can pass the flight physical examination and desire to take part in the Air Force flight training program.

A certain percentage of draft deferments are allocated to students in the basic course, AFROTC, who meet the requirements of the Universal Military Training and Service Act. These deferred students will retain their deferment throughout their course in Air Science if they maintain the required standards of deportment and academic endeavor. Eligibility for draft deferment is a mandatory requirement for entrance into the advanced course in a formal or contract status.

Description of courses

101, 102. *First Year Basic AFROTC* Four Credit Hours

Introduction to AFROTC - 4 hours

Introduction to Aviation - 16 hours
History of development of aviation; classes and types of aircraft; principles of flight.

Fundamentals of Global Geography - 10 hours
Map projections; major geographic areas of the earth; geography of weather; military aspects of global geography.

International Tensions and Security Structures - 15 hours
Status of a nation as a world power; problems of international security; role of United States in world leadership.

Instruments of National Military Security - 15 hours
The Armed Forces: historical development; joint operations; military aviation; place in modern war; characteristics and capabilities; the future of military aviation.

Leadership Training Laboratory - 120 hours
This instruction continues throughout the entire year and includes wearing of the uniform, military courtesy, elements of mass drill and emphasis on leadership qualities.

201, 202. *Second Year Basic Course* Four Credit Hours

Introduction to Air Science II - 1 hour

Elements of Aerial Warfare - 52 hours
Military targets, definitions and types; weapons, including atomic, biological, rocket propelled and psychological; delivery aircraft, including design and type; air ocean, significance of air as a medium for delivery; bases, types, location, size and construction; forces, Air Force combat and support organization.

Careers in the United States Air Force - 7 hours
Purpose and operation of the USAF officer career program.

Leadership Training Laboratory - 120 hours
Entire school year; continues subjects covered in AS II; stresses noncommissioned officer training; gives experience in leading small cadet units.

301, 302. *First Year Advanced Course* Six Credit Hours

Introduction to Advanced AFROTC - 2 hours

The Air Force Commander and His Staff - 8 hours
Covers responsibilities and functions of the Air Force Commander; organization of staff and principles of completed staff work.

Problem Solving Technique - 10 hours
Laws of learning; nature of thinking; methods of problem solving.

Communicating in the Air Force - 18 hours
Nature of communication processes; communication media, with emphasis on military correspondence; general semantics.

Instructing in the Air Force - 7 hours
Suggested techniques in the preparation and presentation of instructional material; methods and systems employed; scoring and grading.

Military Justice Systems - 15 hours
Types of courts-martial; crimes and offenses; board procedures.

Applied Air Science - 50 hours
Aerodynamics and propulsion; aircraft engines; navigation; weather, including weather reports, maps and charts.

Air Force Base Functions - 10 hours
The typical air base organization, its function and the functions of the various base staff officers.

Leadership Training Laboratory - 120 hours
Scheduled through entire year; continues training of preceding two years, plus leadership activities for cadet flight, squadron and group.

Summer Training Camp - Six Weeks Duration at Active Air Force Base.

Processing - 32 hours
Physical examinations; payment of cadets; travel allowances.

Physical Training - 12 hours
Progressive calisthenics and organization of an intramural sports program.

Drill - 12 hours
Practicing techniques learned in leadership training laboratories; parades and reviews.

Individual Weapons - 24 hours
Familiarization and qualification firing of carbine, pistol and submachine gun.

Familiarization Flying - 18 hours
Introduction to pre-flight, in-flight and post-flight activities of aircrewmen.

Field Exercise - 40 hours
Personal hygiene; first aid; camouflage; guard duty, interior and exterior; airdrome defense.

USAF Base Activity and Equipment - 32 hours
Familiarization of cadets with duties on an Air Base, to include tactical and support group missions.

Air Base Problems - 40 hours
Rotating participation in various staff officer positions on a typical Air Force Base in the United States.

Camp Commander's Time - 10 hours

Cadet Free Time - 12 hours

Total Summer Training Camp Time - 232 hours

401, 402. *Second Year Advanced Course* Six Credit Hours

Introduction to AS IV and Critique of Summer Camp - 2 hours

Leadership Seminar - 38 hours
Leadership concepts and responsibilities; functions and leadership at various echelons of command; management and human relation aspects of leadership.

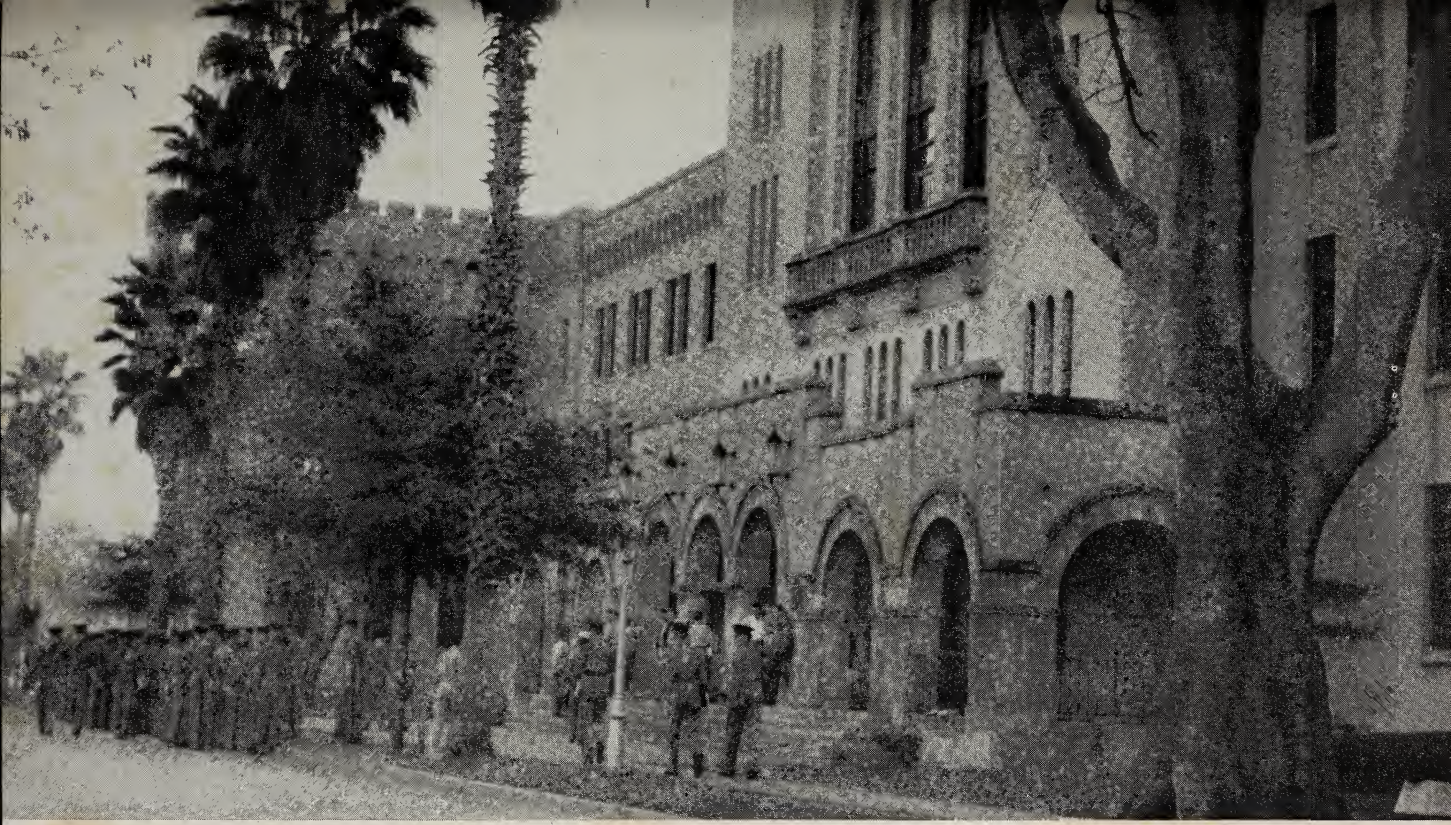
Career Guidance - 5 hours
Review of qualifications for Regular and Reserve commissions in the USAF; career fields; specialized training opportunities.

Military Aspects of World Political Geography - 45 hours
Framework of international politics; anatomy of political power; geographical basis of power; world military and political factors of geography; world powers and strategic areas; world security problems in relation to international power clashes.

Military Aviation and the Art of War - 20 hours
Principles of war; historical survey of basic land, naval and air warfare; modern warfare, with emphasis on military aviation.

Briefing for Commissioned Service - 10 hours
How to prepare and report for first assignment; attitude and activities of primary concern to a newly commissioned officer; the long range Reserve plan.

Leadership Training Laboratory - 120 hours
Continuation of military training offered in the first three years; instruction of subordinates; planning and supervising drill and other Cadet Corps activities.



BOND HALL

THE ARMORY

Modern business has become so large in the size of industrial units and so complex in organization that a mastery of its theory and practice can no longer be acquired through apprenticeship. Today no single industry or business can give so adequate a training to its beginners as can be obtained in the department of business administration of a good college. Such college training is now considered the best method of equipping a man for success as a business and economic leader.

The purpose of the Department of Business Administration is to prepare the student to take his place in a business enterprise with such general knowledge of business that he can forego many of the years of experience which would be required of an apprentice, and to prepare him to enter in full standing the graduate schools of business administration, to pursue further professional business studies, and to take his place in economic society as a professional man in other fields of endeavor with sufficient knowledge to make sound decisions on economic problems.

The courses described below are not all pure business courses; rather they are designed to offer instruction in subjects commonly given in schools of arts and science, in schools of social science, and in schools of business administration.

201. *Economic Origins and Principles* Three Credit Hours
Required of all Business Administration Sophomores.
A study of the origins of capitalism and the development of economic institutions; an introduction to economic principles, including an analysis of supply and demand and of the pricing process under various forms of competition.

202. *Economic Principles and Problems* Three Credit Hours
Required of all Business Administration Sophomores.
A study of income distribution, money and banking, government finance, international economic relations; the problems of labor, agriculture, transportation, large-scale productions, and other contemporary economic problems.
Prerequisite: B. Ad. 201.

203. *Raw Material Wealth* Three Credit Hours
Required of all Business Administration Sophomores.
A study of the geography and the economics of raw materials; the location, the quantity, the quality, the values before and after manufacturing; manufacturing processes; relative importance to economic society.

204. *Business Psychology* Three Credit Hours
Required of all Business Administration Sophomores.
Applied psychology as an aid to the business executive; statistical

measures as an aid to the psychologist; vocational psychology; hiring and promotion of the employee; the psychological factor in the business cycle; the psychology of granting credit, selling, advertising and market research.

303. *Accounting Principles and Practices* Three Credit Hours
Required of all Business Administration Juniors.
A study of the fundamentals of accounting, including the analysis and recording of business transactions and the preparation of financial statements for individuals, partnerships, and corporations; practical problems given in the laboratory. Lecture: two hours; laboratory: two hours.

304. *Advanced Accounting Theory and Practice* Three Credit Hours
Required of all Business Administration Juniors.
An analysis of the balance sheet and the profit and loss statement with particular emphasis in the technique of evaluation of items comprising these statements; practical problems given in the laboratory. Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 303.

305. *Business Law* Three Credit Hours
Required of all Business Administration Juniors.
A discussion of the law which relates to the business man: contracts, agency, negotiable instruments, business association, sales, bailments, security relations, real property, and the like; discussion of court decisions in actual cases to supplement the class work.
Prerequisite: B. Ad. 202.

306. *Business Organization* Three Credit Hours
Required of all Business Administration Juniors.
The legal relations of a business unit; kind of organization best adapted to various sorts of business activity; internal organization for maximum efficiency; the legal nature of mortgages, bonds, stocks; a study of combinations as administrative units.
Prerequisites: B. Ad. 303 and 305.

307. *Principles of Labor* Three Credit Hours
Required of all Business Administration Juniors.
An analysis of the worker's position in modern industry and the effects of industrial production on the worker's social position; introduction to the problems of wages, hours, working conditions, child labor, industrial accidents, unemployment, trade unions, and collective bargaining; economic problems of the worker under current labor legislation.
Prerequisite: B. Ad. 202.

308. *General Insurance* Three Credit Hours
Required of all Business Administration Juniors.

A course in predictable business risks and the methods of minimizing these risks through insurance; intelligent planning of a program of insurance for personal needs and business responsibilities; contract forms, coverages, and rates of life, fire, casualty, marine insurance, and fidelity and surety bonds.

309. *Marketing* Three Credit Hours
Required of all Business Administration Juniors.
The business activities necessary to effect the physical distribution of goods from the producer of the raw materials to the consumer; the marketing institutions; a study of the marketing functions and some marketing problems such as price policies and price maintenance, brands, marketing costs and efficiency.
Prerequisites: B. Ad. 202 and 203.

310. *Foreign Trade* Three Credit Hours
Required of all Business Administration Juniors.
The channels of distribution used in exporting and importing; the theory of international trade, foreign trade promotion activities; the commercial organization and policies governing foreign trade practices; trade methods and problems; financial arrangements.
Prerequisite: B. Ad. 309.

311. *Government Finance* Three Credit Hours
Required of all Business Administration Juniors.
A study from the point of view of the business man of the amount and purposes of governmental expenditures; scope of government financial activity; public budgets; principles of public borrowing; sources of revenue; theories of tax distribution; general principles and practices of the property tax, commodity taxes, corporation and other business taxes.
Prerequisite: B. Ad. 202.

312. *Taxation* Three Credit Hours
Required of all Business Administration Juniors.
A study of the basic principles of income taxation, including a thorough analysis of the present federal law dealing both with persons and corporations; a survey of social security taxes, death taxes, and gift taxes.
Prerequisite: B. Ad. 311.

401. *Industrial Accounting* Three Credit Hours
Required of all Business Administration Seniors.
An elementary course in the principles of industrial accounting, including the accounting for materials, labor, and overhead under the job-order, process, and standard cost systems; practical problems given in the laboratory. Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 304.

402. *Advanced Accounting Problems* Three Credit Hours
Required of all Business Administration Seniors.
A study of advanced accounting problems, including the technical procedures in the organization and liquidation of partnerships; special problems in mergers and consolidations, estates, trusts, and receiverships; practice problems done in the laboratory. Lecture: two hours; laboratory: two hours.
Prerequisite: B. Ad. 304.

403. *Corporation Finance* Three Credit Hours
Required of all Business Administration Seniors.
The manager's problem in securing, disposing of, conserving and using the finances of his business; the legal and practical uses of bond, stock, circulating capital; development of policies regarding dividends, surplus, income, expenses, and captialization in relation to the size of the business unit and type of integration.
Prerequisite: B. Ad. 306.

404. *Investments* Three Credit Hours
Required of all Business Administration Seniors.
Analysis of government, state, municipal, public utility, railroad, and industrial securities; discussion of the tendency to regard stocks as investments; the tests of a good investment applied to securities to give the untrained person an awareness of the nature of his investments and the protection available to him.
Prerequisite: B. Ad. 403.

405. *Sales Administration* Three Credit Hours
Required of all Business Administration Seniors.
The sales problems of retailers, wholesalers, and manufacturing concerns; merchandising policy and research; functions of the various departments connected with sales activities such as credit, traffic, and advertising; selection and training of salesmen; operation of sales branches; sales promotion as dealing with selling methods, advertising, and the planning of sales campaigns.
Prerequisite: B. Ad. 310.

406. *Transportation* Three Credit Hours
Required of all Business Administration Seniors.
A study of the services rendered in the movement of goods by all forms of transportation; rate making; discrimination; competition; cooperation; administration; terminals; and the general effects of these problems on carriers, shippers, and the public.
Prerequisite: B. Ad. 202 and advisedly 405.

407. *Money* Three Credit Hours
Required of all Business Administration Seniors.

The nature and functions of money; the various monetary standards; the development of our monetary system; the factors affecting the value of money; methods and objectives of money and credit control; international exchange; analysis of recent devolopments in money and credit.
Prerequisite: B. Ad. 202.

408. *Banking* Three Credit Hours
Required of all Business Administration Seniors.
A study of the functions, management and operation of commercial banks; the development of banking in the United States; the policies of the Federal Reserve Banks as they relate to the volume of physical production, the national income, and the price level; the relation between commercial banks and investment institutions; organization, operation, and economic effects of the Federal Reserve System; effects of recent changes in banking.
Prerequisite: B. Ad. 407.

409. *Personnel Management* Three Credit Hours
Required of all Business Administration Seniors.
The priciples and practices in the management of employees, introducing positive stimuli into industrial endeavors and promoting the industrial efficiency of labor, treating such factors as selection and placement, training, job analysis, promotion, turnover, health, morale building, and recreation.
Prerequisite: B. Ad. 307.

410. *Production* Three Credit Hours
Required of all Business Administration Seniors.
The problems of the production manager; location and design of plants; internal and external transportation; inventory control; methods of measuring activities of personnel; incentives, efficiencies, budgets, and organization.
Prerequisites: B. Ad. 202, 203 and advisedly 401.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF CHEMISTRY

The objectives of this department are to offer to all freshmen majoring in the sciences or engineering a course in the fundamentals of general chemistry and to freshmen majoring in the arts a course in the introduction to general chemistry, to provide (for students majoring in chemistry) a course of study which will meet the educational requirements of the American Chemical Society for the professional chemist, to afford to pre-medical students adequate preparation for admission to standard medical colleges, and to provide a two-year course for students preparing for the study of dentistry.

Chemistry Major

The courses of study for students majoring in chemistry are designed to prepare them to fill positions as chemists in commercial laboratories or as control chemists in industrial plants, and to provide the basic training for them to enroll as graduate students in full standing at the leading universities.

The courses of study embody training in the four fundamental subdivisions of the science: inorganic, organic, analytical, and physical chemistry.

The department occupies nine commodious laboratories, seven lecture rooms, and one large lecture and demonstration room, all located in the west wing of Bond Hall. The large lecture and demonstration room is equipped with a demonstration desk, the most modern audio-visual aid equipment, an exhaust fan for adequate ventilation, and seats arranged in curved tiers for better vision. The laboratories are equipped with modern apparatus, and all of them are lighted with fluorescent lighting. Supplies are maintained at an adequate level.

The department maintains a centrally-located library with well selected reference books and scientific journals. A complete series of the journals of the American Chemical Society may be found on the shelves of the reading room. Current periodicals and scientific magazines are kept up to date on the reading room tables.

A Chapter of Student Affiliates of the American Chemical Society has been organized at The Citadel.

Students majoring in chemistry are required to take all of the courses offered by the department for Chemistry Majors and also Mathematics 101, 102, and 201, 202; German 101, 102 and 201, 202; and Physics 201, 202.

Pre-Medical Major

The sequence of courses offered to students majoring in pre-medicine is based upon the requirements of the Association of American Medical Colleges for admission to a standard medical college. A student must not only complete certain prescribed work for admission to a medical college but must show also an aptitude for medical studies. The

Medical Aptitude Test, prepared by the Association of American Medical Colleges, is given at The Citadel each year to all students who expect to apply for admission to a medical college.

Students taking the Pre-Medical Elective course are required to take Chemistry 101, 102, 201, 202, 301, 303, 304, 403, 404, and 405, 406; Mathematics 103, 104; Physics 201, 202 and 305, 306; German or French 101, 102 and 201, 202; Psychology 301, 302; and Biology 201, 202, 301, 302 and 401.

Pre-Dental Course

Students who desire to prepare themselves for the study of dentistry are offered a two-year pre-dental course which meets the minimum requirements of the American Association of Dental Colleges for admission to a standard school of dentistry. If the student decides to continue his college training for the Bachelor of Science degree, this curriculum will constitute the first two years of his college work. The courses taken during the last two years must be the same as those required by The Citadel for the Bachelor of Science degree in pre-medicine. Students who complete the two-year pre-dental course are qualified for admission to a school for veterinarians or to a school of pharmacy.

Students taking the Pre-Dental Elective course are required to take Chemistry 101, 102 and 303, 304; Mathematics 103, 104; Physics 201, 202; German, French, or Spanish 101, 102 and 201, 202; English 101, 102 and 201, 202; and Biology 201, 202.

101, 102. *General Chemistry* Eight Credit Hours
Required of all freshmen majoring in the sciences, engineering, or mathematics.
Theoretical and descriptive chemistry, including the elements of modern chemical theory and discussion of some of the more common industrial processes. Lectures and recitation: three hours a week; laboratory: two hours a week.

103, 104. *Introduction to General Chemistry* Six Credit Hours
Required of all freshmen majoring in the arts courses.
A course designed for students majoring in the arts courses who do not expect to take any other course in chemistry; the fundamental principles of chemistry as drawn from the experiences of daily life considered; less comprehensive than Chemistry 101, 102. Lectures and recitations: two hours a week; laboratory: two hours a week; laboratory demonstrations and movies: one hour a week.

201, 202. *Qualitative Analysis* Six Credit Hours
Required of all sophomores majoring in chemistry or pre-medicine; elective to others.
The separation and identification of the common cations and anions,

with emphasis on the theory involved. Lectures: two hours a week; laboratory: three hours a week.
Prerequisites: Chemistry 101, 102.

301, 302. *Quantitative Analysis: Volumetric and Gravimetric* Eight Credit Hours
Volumetric and gravimetric analysis: required of all juniors majoring in chemistry; and volumetric analysis: required of all seniors majoring in pre-medicine; elective to others.

Emphasis in the lecture room placed upon the theory of quantitative analysis and the solution of stoichiometric problems; in the laboratory, quantitative experiments performed by the students. Lectures: two hours a week; laboratory: four hours a week.
Prerequisites: Chemistry 101, 102 and 201, 202.

303, 304. *Organic Chemistry* Eight Credit Hours
Required of all juniors majoring in chemistry or pre-medicine; may be taken by students majoring in pre-dentistry in the sophomore year, with grade of C or better in Chemistry 101, 102.
The aliphatic and aromatic series and heterocylic compounds; classroom discussions, lectures, and laboratory training in general reactions and synthetic methods. Lecture: three hours a week; laboratory: three hours a week.
Prerequisites: Chemistry 101, 102 and 201, 202 for students majoring in chemistry or pre-medicine and Chemistry 101, 102 for students majoring in pre-dentistry.

401, 402. *Physical Chemistry* Eight Credit Hours
Required of all seniors majoring in chemistry; elective to others.
A study of the properties of solids, liquids, and gases, and of their relation to chemical constitution. Lecture: three hours a week; laboratory: three hours a week.
Prerequisites: Chemistry 301, 302 and Mathematics 201, 202.

403, 404. *Advanced Topics in Organic Chemistry* Six Credit Hours
Required of all seniors majoring in chemistry or pre-medicine.
This course designed to familiarize students with the survey of complicated molecules and their reactions, thus contributing to their facility for undertaking the study of bio-chemistry and other complicated fields of organic chemistry. Lecture and recitations: three hours a week.
Prerequisites: Chemistry 303, 304.

405. *Advanced General Chemistry* Three Credit Hours
Required of all seniors majoring in pre-medicine; elective to others.
A comprehensive review of inorganic chemistry with special emphasis on equilibria, the periodic law, and the relation of chemical behavior to atomic structure. Lecture: three hours a week.
Prerequisites: Chemistry 101, 102 and 201, 202.

406. *Physical Chemistry for Pre-Medical Students* Three Credit Hours
Required of all seniors majoring in pre-medicine.
A course designed to permit students majoring in pre-medicine and lacking mathematical training to survey the general method of investigation of physical chemists in *quasi*-mathematical forms. Lecture: three hours a week.
Prerequisites: Chemistry 101, 102 and 201, 202; and Physics 201, 202.

407. *Advanced Quantitative Analysis* Four Credit Hours
Required of all seniors majoring in chemistry; elective to others.
Analysis of metals and alloys, iron ores, water analysis and boiler water control, fuels and fertilizer, and the application of modern instruments to the analysis of industrial materials. Lecture: two hours a week; laboratory: four hours a week.
Prerequisites: Chemistry 301, 302.

408. *Qualitative Organic Analysis* Four Credit Hours
Required of all seniors majoring in chemistry; elective to others.
The classification, the study of type reactions, and the identification of pure organic compounds and mixtures of organic compounds. Lecture: two hours a week; laboratory: four hours a week.
Prerequisites: Chemistry 303, 304.

409. *Organic Preparations* Three Credit Hours
Required of all seniors majoring in chemistry.
Advanced organic syntheses and technique with emphasis on purity and yield of products. Lecture: one hour a week; laboratory: four hours a week.
Prerequisites: Chemistry 303, 304.

Biology and Geology

No attempt is made at The Citadel to maintain separate departments in these two subjects. The courses are under the supervision of the Department of Chemistry.

The courses in biology offered to students majoring in pre-medicine meet the requirements of the more exacting medical colleges. However, since possibly no science has made a greater contribution to modern philosophy than these two, a knowledge of at least their elemental aspects is a distinct contribution to the general culture of the students. Accordingly, Biology 201, 202, 203, 204, and Geology 301, 302 are made available for election to all juniors and seniors. Geology 303 is limited to students majoring in civil engineering.

201, 202. *Elementary Zoology* Eight Credit Hours
Required of all sophomores majoring in pre-medicine or pre-dentistry; elective to others.
The various classes of animal organisms from the standpoint of anat-

omy, physiology, phylogeny and ecology; occasional lectures given on some of the broader aspects of the subject such as heredity, cycle of the germ-cell, pathogenic organisms. Lecture: two hours a week; laboratory: four hours a week.

203, 204. *General Biology* Six Credit Hours
Required of all students electing the Teacher Training Program, and those majoring in physical education; elective to others except students majoring in pre-medicine or pre-dentistry.

The more important principles of biology including taxonomy, physiology, inheritance, variation, and organic development; application of biological principles to human problems emphasized. Lecture: three hours a week.

301, 302. *Comparative Vertebrate Anatomy* Eight Credit Hours
Required of all seniors majoring in pre-medicine.
Comparative anatomy of vertebrate forms. Lecture: two hours a week; laboratory: four hours a week.
Prerequisites: Biology 201, 202.

303. *Human Biology: Anatomy* Three Credit Hours
Required of juniors majoring in physical education.
The structure of the body considered, with special emphasis upon the skin, musculature, and the skeleton. Lecture: three hours a week.
Prerequisite: Biology 203, 204.

304. *Human Biology: Physiology* Three Credit Hours
Required of juniors majoring in physical education.
A consideration of human physiology from a practical point of view, the processes of digestion, assimilation, elimination, circulation, respiration, excretion, and reproduction considered. Lecture: three hours a week.
Prerequisite: Biology 203, 204.

401. *Embryology* Four Credit Hours
Required of all seniors majoring in pre-medicine.
Embryology of representative vertebrates, including the amphibian and bird, with additional material on mammals. Lecture: two hours a week; laboratory: four hours a week.
Prerequisite: Biology 301, 302.

402. *Descriptive Histology* Three Credit Hours
Elective to all seniors majoring in pre-medicine or pre-dentistry.
Histology of mammalian tissue with descriptive function of each; practical work in the identification of vertebrate tissue and occasional lectures on microscopic technique. Lecture: two hours a week; laboratory: two hours a week.
Prerequisite: Biology 301, 302.

301, 302. *Elementary Geology* Eight Credit Hours

Elective to all juniors and seniors.

The various processes, such as crust movements, igneous influences, weathering, erosion, denudation, and transportation which have been instrumental in shaping the earth; the composition, structure, and arrangement of igneous and sedimentary rocks; and a survey of the historical aspects. Lecture: three hours a week; laboratory: two hours a week.

303. *Engineering Geology* Four Credit Hours

Required of and limited to juniors majoring in civil engineering.

The origin and occurrence of the three major groups of rocks, their composition, resistance to weathering, and employment in engineering construction; the various processes of dynamic geology considered with special reference to their application to engineering practice. Lecture: three hours a week; laboratory: two hours a week.

420. *Senior Essay* Three Credit Hours

Required of seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF CIVIL ENGINEERING

The objective of this department is to give a course that will meet the basic educational requirements of the profession of civil engineering. This objective is sought through a co-ordinated program of liberal, scientific, and technological courses designed to broaden and enrich the student's general education as well as to lay the foundation for technical competence. A four-year undergraduate program does not provide time for more than a few of the most essential liberal courses; hence, with the exception of English, history, and the sciences, students of engineering must depend upon the liberal value of the technical and professional courses to achieve a reasonably well-rounded general education. Such liberal value as may be developed in these courses will depend to a great extent upon the skill with which instructors use them to awaken a catholicity of interest and social consciousness in the students.

The program in the freshman class does not differ essentially from liberal programs in most undergraduate courses. In the sophomore class, limited specialization begins with the introduction of courses in surveying, analytic mechanics, and graphic statics. In the junior and senior years the time is devoted to basic professional courses. Throughout the four years the program is taught with the primary emphasis upon inculcating habits of orderly study, investigation, and sound rea-

soning rather than upon the mere acquisition of factual information. Constant attention, too, is given to engineering procedure in its wider sense, that is, the characteristic methods by which engineers conceive, design, and construct engineering projects.

Such a curriculum, ably taught, should prepare the better students to develop a mastery of such special fields as their subsequent employment may lead to, or to pursue more advanced work in the graduate schools of engineering. In general educational value, if properly adapted to the student's interests and aptitudes, it should meet the educational demands of good citizenship in whatever field the graduate enters.

The new concept of the engineer is that of a professional man thoroughly grounded in technology but also alive to the social and economic implications of his professional activities. It appears to be clearly the duty of engineering schools to fashion their graduates in this mold in so far as time limitations will permit.

The civil engineering curriculum is accredited by the Engineers' Council for Professional Development.

There is a successful student chapter of the American Society of Civil Engineers.

DEGREES: The degree of Bachelor of Science in Civil Engineering (B.S. in C.E.) is awarded to those who successfully complete the program of studies on page 57. For regulations governing the award of the professional degree of Civil Engineer, see page 53.

BUILDINGS: The department is housed in its own buildings on the north of the campus. The main building was designed specifically for the needs of civil engineering instruction, and it contains the necessary laboratories, drafting rooms, classrooms, and other rooms needed to carry on the work of the department. The auxiliary building houses a portion of the soils laboratory.

LIBRARY: The department maintains a small but well selected and arranged library that is open to students at all hours. Current copies and files of leading engineering magazines are available in the reading room.

EQUIPMENT: Well equipped laboratories are maintained for work in cement and concrete, soils, hydraulics, and structural materials. For the work in cement and concrete a curing room with temperature and humidity controls and another room for steam curing are available.

In the concrete laboratory there is an adequate supply of equipment for every student to prepare his individual test specimens. The equipment includes a large supply of molds, platform scales, mixing tables, a two-cubic foot concrete mixer, concrete block machine, air entrainment apparatus, and the usual minor articles.

In the materials testing laboratory the main items of equipment are

a 400,000 pound Baldwin-Southwark universal hydraulic testing machine with a clearance of ten feet for column testing and a 36-inch wide working table; a 150,000 pound Olsen screw-power universal testing machine; a Rockwell hardness testing machine; a Sonntag fatigue machine; Brinell, cold bend, shearing, and transverse testing attachments, three spherically seated bearing blocks, and a variety of specimen grips for tensile testing; S R-4, Berry, Whittemore, and G. F. Moore strain gauges; compressometers, deflectometers, and other instruments for measuring deformation; machined bearing blocks and I-beam with adjustable supports for transverse tests. This laboratory is equipped with an overhead crane for handling heavy specimens in any part of the room.

The soils laboratories are equipped with both scale and dead-weight consolidometers, triaxial and direct shear machines; unconfined compression machine; permeameters; Atterberg limit equipment; Proctor and modified A.A.S.H.O. compaction apparatus; standard sieves and soil hydrometers, C. B.R. apparatus; and other equipment needed for tests and experiments with soils.

The hydraulics laboratory is equipped for a variety of experiments in the flow of water through pipes and orifices and over weirs. Water is supplied by a 500 gpm centrifugal pump to a constant head tank, from which it is distributed to the various test units and returned through floor channels to the pump intake. Equipment includes Venturi meter, orifices, weirs, pipe ranges, differential gauges, hook gauges, weighing tanks and scales.

Adequate equipment is available for the courses in surveying. This includes fourteen transits, nine levels, four plane tables, two sextants, aneroid barometer, several compasses, standardized tapes, and a complete supply of level rods, tapes, and pins. For photogrammetric work there is a rectoplanograph, stereocomparagraph, stereoscopic radial plotter, extended eye base stereoscope, parallax bar, "Lazy Daisy" mechanical triangulation set, forty pocket stereoscopes, and about five hundred aerial photographs of various sections of the United States including a complete stereoscopic coverage of Charleston County, South Carolina. This equipment is used in both the surveying and the drawing courses.

All drafting rooms and the library are equipped with fluorescent lighting. Two of the larger classrooms and one drafting room may be darkened at any time to show motion pictures, for which a sound projector is available. The drawing rooms are furnished with tables, and there are available drafting machines, parallel rules, planimeters and necessary minor items. A printing room is equipped with an Ozalid dry printing machine.

A computation room in the center of the building, open to students

at all times, is equipped with ten Monroe calculating machines. This facility has done much to expedite numerical calculations and thus saves much of the students' time.

Civil Engineering Juniors are required to elect either Survey of American History, Hist. 101, 102 or Intermediate Calculus and Differential Equations, Math. 301, 302.

101, 102. *Drawing and Descriptive Geometry* Eight Credit Hours
Required of all Civil and Electrical Engineering Freshmen.
Use and care of drawing instruments; proper weights and types of lines for clear, clean-cut, and complete graphical representation; useful geometrical constructions; freehand sketching; orthographic projection; auxiliary, revolved, and sectional views; pictorial representation with emphasis on isometric drawing; dimensioning; true lengths and shapes; intersections and developments; problems on points, lines, and planes to be solved by the method of auxiliary planes in third angle projection. Problems selected with a view to emphasizing the practical applications and developing the ability of the student to think in three dimensions. Development of reasonable skill in lettering, a requirement for credit in this course. Lecture: two hours; laboratory: four hours.

201. *Engineering Drawing* Two Credit Hours
Required of all Civil and Electrical Engineering Sophomores.
Machine drawing; methods of representing fastenings, springs, and other machine parts; detail and assembly drawings of simple machines with special attention to theory of dimensioning, precise measurements, and checking; topographical drawing; contour mapping; solution of problems by use of contour maps; profiles and cross-sections; use of planimeter in area and earthwork computations; use of Geological Survey maps for preliminary studies of engineering projects. Laboratory: four hours.
Prerequisites: C.E. 101, 102.

202. *Analytic & Graphic Statics* Three Credit Hours
Required of all Civil Engineering Sophomores.
Analytic and graphic solution of problems in statics: principles of statics; resultants, reactions, and equilibrium of forces; analysis of simple beams and trusses; force systems in space; the laboratory period to be used for graphical solutions. Lecture: two hours; laboratory: two hours.
Prerequisites: C.E. 201; Phys. 201; Math. 101, 102.

204. *Photogrammetry* One Credit Hour
Required of all Civil Engineering Sophomores.
An elementary course in aerial photography and topographic mapping; methods of topographic projection; planning topographic flights; basic

photo-interpretation; geometric properties of photographs; radial line plotting; photographic measurements. Laboratory: two hours.
Prerequisites: C.E. 205; C.E. 101, 102; C.E. 201.

205, 206. *Surveying* Eight Credit Hours
Required of all Civil and Electrical Engineering Sophomores.

Linear measurement; leveling; compass and transit; slide rule and calculating machines; theory of errors; land surveying; boundary laws; latitudes and departures; areas and volumes; stadia; plane table: route surveys; vertical, circular and transition curves; state plane coordinates. Required student equipment: loglog duplex slide rule. Lecture: three hours; field: two hours.
Prerequisites: Math. 101, 102.

301. *Analytic Mechanics* Four Credit Hours
Required of all Civil Engineering Juniors.
Statics and dynamics; friction; centroids and centers of gravity; moment of inertia; kinematics and kinetics. Lecture: four hours.
Prerequisites: C.E. 202; Math. 201, 202; Phys. 201, 202.

303, 304. *Mechanics of Materials* Six Credit Hours
Required of all Civil Engineering Juniors.
Elastic properties of structural materials: internal stresses and strains in beams, columns, shafts, riveted and welded joints; combined stresses; deflections; principal stresses; unsymmetrical bending. Supplemented by Materials Laboratory C.E. 307, to be taken either before or concurrently with C.E. 303. Lecture: three hours.
Prerequisites: C.E. 202; Math. 201, 202; Phys. 201, 202.

305. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.
Highway economics; planning and financing; legislation and administration; plans; location and geometric design; highway materials and material specifications; basic principles of traffic surveys; alignment and earthwork drawings and computations; routine tests of highway materials, bituminous and non-bituminous. Lecture: two hours; laboratory: two hours.
Prerequisite: C.E. 205, 206.

306. *Highway Engineering* Three Credit Hours
Required of all Civil Engineering Juniors.
Pavement and base thickness design; soils, drainage, grading; construction of roadway elements; construction surveys and estimates; maintenance; contracts and specifications. Lecture: three hours.
Prerequisite: C.E. 305.

307. *Materials Laboratory* Two Credit Hours
Required of all Civil Engineering Juniors.
Laboratory supplement to Mechanics of Materials C.E. 303. Intro-

duction to the use of testing machines and equipment; strength and deformation measurements of ferrous metals and concrete; properties of materials as determined by test results; compression, tensile and bending specimen tests; use of S R-4 electric strain gauge; use of ASTM Specifications and Test Procedure. Laboratory: four hours.
Prerequisites: C.E. 202; Math. 201, 202; Phys. 201, 202.

308. *Stress Analysis* Three Credit Hours
Required of all Civil Engineering Juniors.
Analytic solution of simple structures: reactions, shears and moments for fixed and moving loads on beams and trusses; stresses in various types of statically determinate framed structures; influence line diagrams; standard loadings for highway and railway bridges; shop drawings. Lecture: two hours; laboratory: two hours.
Prerequisites: C.E. 301; C.E. 303.

310. *Engineering Law & Specifications* Three Credit Hours
Required of all Civil Engineering Juniors.
An elementary course in law in relation to engineering practice, beginning with a brief study of the Constitution of the United States; contracts, agency, real and personal property, sales, mechanic's liens, workman's compensation laws; construction contract documents; advertising and awarding contracts; writing and interpretation of standard specifications. Lecture: three hours.

401. *Concrete Laboratory* Two Credit Hours
Required of all Civil Engineering Seniors.
Design, preparation and testing of portland cement concrete mixes for a desired quality of concrete using both plain portland cement concrete and concretes containing the various commonly used admixtures; test specimens cured under controlled temperature and moisture conditions; close attention given to the influence of the quality and grading of the aggregates and to other features which affect the properties of the concrete ultimately forming a structure; the fundamentals of making concrete masonry building units studied by making blocks from various "damp" mixes in a vibrating type block machine. Lecture: one hour; laboratory: two hours.
Prerequisite C.E. 307.

402. *Soil Mechanics Laboratory* Two Credit Hours
Required of all Civil Engineering Seniors.
Classification, control, and soil strength tests to predict suitability of soil for use in earth dams, roads, and foundations; to include specific gravity, combined mechanical analysis, Atterberg limits, permeability, compaction, unconfined compression, consolidation, triaxial, direct shear, and C.B.R. tests; field tests to consist of field density tests, soil borings, and load tests. Lecture: one hour; laboratory: two hours.
Prerequisites: C.E. 409; C.E. 401; C.E. 410 to be taken concurrently.

403, 404. *Reinforced Concrete Design* Six Credit Hours
Required of all Civil Engineering Seniors
Theory and design of reinforced concrete structures; slabs; beams; retaining walls; combined stress members; columns; design of a concrete warehouse with special attention to current specifications for design and construction. Lecture: three hours.
Prerequisites: C.E. 303, 304; C.E. 308.

405, 406. *Steel Structures, Theory & Design* Eight Credit Hours
Required of all Civil Engineering Seniors.
Theory of modern steel structures; analysis of railway and highway bridge trusses; complete design of a highway truss; analysis and design of a mill building; theory of statically indeterminate structures; methods of work, slope deflection, moment distribution; theory and design of plate girders. Lecture: three hours; laboratory: two hours.
Prerequisites: C.E. 303, 304; C.E. 308.

407. *Hydraulics* Four Credit Hours
Required of all Civil Engineering Seniors.
Liquid properties; hydrostatics; Bernoulli theorem and its applications in Venturi meter, orfices, weirs, pipes, and open channels; the laboratory period used for experimental demonstration of the theory and for supervised computation work. Lecture: three hours; laboratory: two hours.
Prerequisites: C.E. 301; C.E. 303, 304.

408. *Water Supply & Sewerage* Three Credit Hours
Required of all Civil Engineering Seniors.
Relationship of water supply and sewage disposal to public health; consumption of water; quality standard; collection, treatment, and distribution of water; sewers and sewerage; quantity and characteristics of sewage; methods of treatment and disposal of sewage. Lecture: three hours.
Prerequisite: Completion of all work of the junior year.

409, 410. *Soil Mechanics & Foundations* Six Credit Hours
Required of all Civil Engineering Seniors.
Soil physics; nomenclature and field identification; grain shape and soil structure; classification systems; soil capillarity; Atterberg limits; permeability; seepage; flow nets; piping; subsurface drainage; frost action; permafrost; stresses in soils; consolidation; shear strength; stability of slopes; earth dams; bearing capacity; shallow foundations; pile foundations; earth pressure; retaining walls and open cuts; underpinning; caissons and cofferdams; subsurface exploration; soil stabilization. Lecture: three hours.
Prerequisites: Geol. 303; C.E. 303, 304; C.E. 301; C.E. 305, 306; C.E. 402 to be taken concurrently with C.E. 410.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF EDUCATION

I. TEACHER-TRAINING

The chief function of the Department of Education is the training of secondary school teachers. To this end, it provides two teacher-training curriculums culminating in the degree of Bachelor of Science in the field of education.

One of these is a major in education which prepares for teaching in the secondary school subject-matter fields.

The second is a major in physical education which prepares for positions in physical education in high schools, in community health and recreation, in industrial establishments, and in the armed forces.

Both of these majors meet the South Carolina professional certification requirements for teaching in senior and junior high schools, and in general meet the certification requirements of other states.

Following are the descriptions of the courses included in these two teacher-training curriculums.

THE EDUCATION MAJOR

The following courses are required in this curriculum.

Ed. 307, 308. *Principles and Problems of Secondary Education* — Six Credit Hours

Definition and analysis of the fundamental issues underlying American secondary education; the principles most applicable to the solution of these problems; the aims, curriculum, scope, and organization of the secondary school. Secondary education in a changing America; the impact of world conditions upon the secondary school; American secondary school and the future.

Ed. 400. *Directed Teaching* — Six Credit Hours

Required of all wishing to qualify for state certificates; observation and teaching in approved high schools under approved advisory teachers; visitation and supervision by Department of Education supervisor; individual and group conferences of college supervisor, training teacher, and trainee.

Ed. 401, 402. *Methods and Materials of Secondary School Teaching* — Six Credit Hours

Study of the aims, methods, procedures, and materials employed in secondary school teaching; organization of subject-matter; motivation and direction of learning; development of attitudes, appreciations and ideals; classroom presentation of formal materials; conducting informal activities and experiences; provision for individual differences; measuring educational outcomes; observation of teaching; reports; discussion.

Ed. 403. *Seminar in Secondary Education* — Three Credit Hours

For students who are taking, or who have taken, Ed. 400, *Directed Teaching;* definition and discussion of principles, methods, and prob-

lems related to experience in directed teaching; consideration of practical problems of secondary school teaching and administration; discovery of specific professional interests; readings; reports.

Ed. 407. *Audio-Visual Aids* Three Credit Hours
The aims and scope of audio-visual instruction and publicity; the functions of audio-visual aids in learning; principles and techniques underlying their use; projects and practice in the uses of objects, specimens, models, and pictures; the opaque projector, the motion picture, the film strip, and slides; radio, television, the public address system, and the various types of recorders; selection and care of equipment; administration and supervision of the audio-visual program.

Ed. 411. *Guidance* Three Credit Hours
Philosophy, principles, and techniques to provide teachers with competencies needed for participation in guidance programs; theories and practices of guidance; mental, vocational, and aptitude testing.

E. 420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

THE PHYSICAL EDUCATION MAJOR

The Department of Eductaion offers a major curriculum in the field of physical education.

Since most high school athletic coaches are called upon to teach, a teacher-training program is made an integral part of the physical education curriculum at The Citadel, and graduates are qualified for certification in the fields of history and general science.

In this curriculum, the following courses in physical education are required:

Ph. Ed. 201. *Introductory Survey of Physical Education* Three Credit Hours
An introductory survey of physical education; historical background, nature, scope and function of physical education; its aims, objectives, and principles; appraisal of possible positions in the overall field of physical education.

Ph. Ed. 301. *Health Education* Three Credit Hours
Community, group, and personal health problems considered; emphasis placed on producing recognition and understanding of health and safety factors in relation to the school situation.

Ph. Ed. 302. *Baseball* One Credit Hour
Team offensive and defensive organization; practice in fundamental individual baseball skills and the elements of position play; teaching and coaching; rules, interpretation, and officiating.

Ph. Ed. 303. *Basketball* One Credit Hour
Comparative study of defensive and offensive systems of team play; development of basic individual skills and techniques; teaching and coaching; rules and officiating.

Ph. Ed. 304. *Gymnastics, Tumbling, and Recreational Sports and Games* Two Credit Hours
Recreational and educational possibilities; aims and objectives of group and institutional programs; techniques; practices; adaptation of activities to interests and abilities.

Ph. Ed. 305, 306. *Intramural Sports Program* One Credit Hour
Actual organization, management, and supervision of intramural activities at The Citadel; care of equipment; scheduling; keeping records.

Ph. Ed. 307. *Tennis* One Credit Hour
Drill in mechanics of grips, strokes, and services; fundamentals of singles and doubles court play; strategy and psychology of competition; teaching techniques.

Ph. Ed. 308. *Track* One Credit Hour
Introduction to a wide variety of track and field events; study of principles and techniques; practices in basic skills; teaching and officiating; the organization and management of track meets.

Ph. Ed. 401. *Organization and Administration of Physical Education* Three Credit Hours
Organization: delegation of authority and responsibility; use of the democratic method; formation of teams, tournaments, and leagues; program aims and objectives; curriculum building; course construction; lesson planning; special methods in instruction; class management and scheduling.
Administration: selection, purchase, and care of equipment; office policies and systems; budgeting and finances; publicity; motivating attendance; team and game mangement.

Ph. Ed. 402. *Football* Three Credit Hours
Analysis and evaluation of offensive and defensive tactics, formations, and plays; individual techniques and fundamental skills in position play; teaching materials and methods; coaching; rules and rule interpretations; practice in officiating.

Ph. Ed. 403. *Individual Physical Education* Three Credit Hours
Principles and practices in the conditioning and care of athletes; the medical examination; safety in athletics; prevention of injuries; methods of massage and taping; therapeutic aids; kinesiological analysis of the mechanical action of bones and muscle groups; the handicapped student; diagnosis and assignment of special activities within, and outside of the regular class work.

Ph. Ed. 404. *Methods of Teaching Physcial Education* Three Credit Hours
Lectures, discussion, demonstration, and practice in teaching physical education in high school; selection and organization of materials for the program; techniques of instruction, lesson plans, administering and organizing classes for effective procedures.

Ph. Ed. 420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

II. ELECTIVE FIELDS

The Department of Education offers required and elective courses in the field of psychology, sociology, philosophy, classical languages, and fine arts. Courses in these fields may be elected by students in the departments other than education provided their class standing entitles them to make such election. Students are not to elect a course scheduled in a year of college work more advanced than the college class of which they are members, but they may elect courses scheduled for less advanced classes.

Students from other departments may elect any course offered under "Education" with the exception of Ed. 400, *Directed Teaching* and Ed. 403, *Seminar in Secondary Education.* All the "activity" courses of the Physical Education curriculum, such as baseball, tennis, etc., except Ph. Ed. 305, 306, *Intramural Sports Program* are open only to students taking the full degree program in physical education.

Following are the elective fields and courses provided by the Department of Education.

Psychology

Psy. 201. *Educational Psychology* Three Credit Hours
Heredity, maturation, and environment as constituent factors in human nature; the nervous system as the basis of experience and behavior; individual differences; intelligence; adolescence; learning: interest; principles and practices of effective learning; psychological approaches to pupil behavior.

Psy. 202. *Educational Psychology* Three Credit Hours
The psychology of teaching; motivational factors; attention and perception; emotion; *gestalt* concepts; attitudes, beliefs, and habits; tests and measurements; mental discipline and transfer; personality: personal and social factors; emotion; mental health.

Psy. 303. *General Psychology* Three Credit Hours
Elective for juniors and seniors. Required of pre-medical students. An introduction to the scientific study of human behavior; emphasis upon experimental investigation of such fields as attention, perception, learning, intelligence, emotion, personality.

Psy. 304. *Abnormal Psychology* Three Credit Hours
Required of pre-medical students.
Structural and functional disorders connected with sensation, perception, and association; theories of personality; discussion of the common neuroses and psychoses.
Prerequisite: Psychology 303.

Psy. 305. *Social Psychology* Three Credit Hours
A study of the individual in relation to his social environment with

special attention to group behavior, social motivation, and individual adjustment to group situations; may be considered as a social science course.

Philosophy

Phil. 306. *Logic* Three Credit Hours
Elective for juniors and seniors.
The principles of valid thinking; laws of reasoning; common fallacies; deductive and inductive methods.

Phil. 307. *Greek Thought* Three Credit Hours
Elective for juniors and seniors.
A brief survey of Greek philosophy, primarily a study of Plato's *Republic* and Aristotle's *Politics.*

Classical Languages

Gr. 101, 102. *Elementary Greek* Six Credit Hours
Fundamentals of the Greek language. Recommended for students preparing for the study of medicine or theology.

Gr. 201, 202. *Intermediate Greek* Six Credit Hours
Selections from Xenophon, Plato, and the New Testament.
Prerequisite: Greek 101, 102.

Lt. 101, 102. *Elementary Latin* Six Credit Hours
Latin grammar and translation; course dependent upon the background of the students. Recommended for pre-law students.

Lt. 201, 202. *Intermediate Latin* Six Credit Hours
Cicero, Livy, and Horace.
Prerequisite: Latin 101, 102.

Sociology

The following courses in the field of sociology are numbered in their logical order of sequence. However, no course is prerequisite for any other that is offered. Open to juniors and seniors only.

Soc. 301. *Introduction to Sociology* Three Credit Hours
A study of the principles of sociology, embracing the factual knowledge concerning the history of culture with particular stress laid upon the social heritage, the formation and functioning of social groups, intergroup relationships, and group conflicts.

Soc. 302. *Social Disorganization* Three Credit Hours
A study of the breakdown of society in its various forms with consideration of the causation as well as the resultant problems; special emphasis given to contemporary problems such as the broken family, juvenile delinquency, unemployment, and individual personality maladjustment.

Soc. 303. *The Contemporary American Family* Three Credit Hours
A frank and comprehensive analysis of the problems confronting the

modern American family, with case studies treating the various phases of conflict within the family.

Soc. 401. *Criminology* Three Credit Hours

A study of crime, its causes, conditions, prevention, and treatment; theoretical views and hypotheses supported by concrete facts, a method assuring the student that any theory proposed or upheld is based upon realities and exact observation.

Soc. 402. *Social Anthropology* Three Credit Hours

The nature of social organization and the processes of social interaction characterizing different societies; stress on culture in relation to the society which is the creator and bearer of that culture.

Fine Arts

The following courses are designed primarily for prospective teachers who need credit in the Fine Arts for a teaching certificate.

Art 305. *Music Appreciation* Three Credit Hours

A non-technical course proposing to enhance the student's understanding and enjoyment of music by a two-fold approach: first, to gain fundamental knowledge of style, content and form of the more outstanding works of the great composers; and, second, to study the evolution of musical art up to the present time; particular emphasis placed upon the latter.

Art. 306. *Art Appreciation* Three Credit Hours

Lectures on the history and appreciation of art with a view of developing an appreciation of art techniques and art qualities.

DEPARTMENT OF ELECTRICAL ENGINEERING

In 1941 the Board of Visitors authorized the establishment of a Department of Electrical Engineering at The Citadel. The department was founded to meet the needs of many students who are attracted to the type of education which The Citadel offers, but who were formerly compelled to go elsewhere to obtain training in the field of their special interest.

A considerable part of the normal curriculum in electrical engineering had long been offered by the Department of Physics for the benefit of students in physics and in civil engineering. Upon the founding of the Department of Electrical Engineering, this work was expanded into a curriculum concordant with the offerings of other engineering colleges, and the laboratory facilities were augmented to provide training leading to the degree of Bachelor of Science in Electrical Engineering. Before any instruction had been given in the advanced phases of this program, all of the men enrolled in it were withdrawn for service in the armed forces, and the development of the department was arrested until after the close of the war.

The first graduating class of eight men received degrees in September, 1948. Since then, the department has grown steadily in facilities and in enrollment. In December, 1949, eighty students in electrical engineering were admitted to Student Membership in the American Institute of Electrical Engineers, marking the first phase in professional recognition of the curriculum.

It is the purpose of the department to prepare men for professional work or for graduate study in the field of electrical engineering and to give them training in as many of the elements of a broad education as can be included in a program of professional study leading to the degree of Bachelor of Science in Electrical Engineering.

The laboratories and classrooms of the department are in the east wing of Bond Hall. Two dynamo laboratories are equipped with machine benches having individual electric power panels to which connections are made by polarized plugs. Three motor-generators provide variable-voltage direct current to outlets on each machine-bench panel. Each panel also has A.C. outlets which provide single-phase and three-phase service at 120 volts and at 220 volts. For special uses, the A.C. supply lines are supplemented by a polyphase transformer bank, wired to a junction panel. This provides flexible connection for several additional single-phase, two-phase, and three-phase voltages.

The machines are in moderate size to allow the student to have intimate contact with them in their operation. This also eliminates the ready-made connections, the complex control devices, and the cumbersome metering circuits required by large machines. The student can, therefore, make his own connections and operate and control the machines without assistance. With the exception of a few units designed particularly for the laboratory, the machines are typical commercial equipment. They represent all modern types of small A.C. and D.C. machinery in common use. Meters, instruments, load components, control devices, tachometers, oscillographs, and machine accessories are provided.

An instrument stock-room joins the electronics laboratory to the electrical-measurement laboratory. The apparatus for each of these laboratories is modern precision equipment made for laboratory and industrial use. Both laboratories are equipped with consistent and coordinated connector devices which promote neatness and speed in circuit wiring.

The shop contains modern machine tools with individual motor-drives, power woodworking tools, benches, cabinets, electric and gas welders, and spray painting equipment. Its facilities are adequate for instrument repair and maintenance, and for construction of special apparatus. A photographic dark-room is equipped for developing films and making prints.

Curriculum

The courses of freshmen and sophomores are the same as in civil engineering, with one exception. These courses are described by the departments which offer them.

202. *Introduction to Electrical Engineering* Three Credit Hours
Required of Electrical Engineering Sophomores.
D.C. circuit theory; simple networks and their solution; introduction to electric and magnetic fields; electrical measuring instruments; selected topics supplementing the electrical content of Physics 202. Lecture: three hours.
Prerequisites: Math. 101, 102; Physics 201.

301. *D.C. Circuits and Machines* Five Credit Hours
Required of Electrical Engineering Juniors.
Flux, torque, current, electromotive force, and speed relations in self-regulating machines; control of motors and generators; power losses and efficiencies of machines; commutation and armature reaction; magnetic and electric circuit calculations. Lecture: five hours.
Prerequisites: Math. 201; Physics 202; E.E. 202.

302. *A.C. Circuits and Machines* Five Credit Hours
Required of Electrical Engineering Juniors.
Analytical and vector treatment of harmonically varying electromotive forces, currents, and power in any combination of resistance, inductance, and capacitance; calculation of balanced and unbalanced polyphase circuits; construction, theory, design, and operation of alternators, motors, transformers, and converters; control equipment; power factor correction, voltage regulation of the single phase transmission line. Lecture: five hours.
Prerequisites: E.E. 301; Math. 202.

303. *D.C. Machines Laboratory* Two Credit Hours
Required of Electrical Engineering Juniors.
A laboratory course to accompany E.E. 301. Laboratory: four hours.

304. *A.C. Machines Laboratory* Two Credit Hours
Required of Electrical Engineering Juniors.
A laboratory course to accompany E.E. 302. Laboratory: four hours.

306. *Elements of Electrical Engineering* Four Credit Hours
Required of Civil Engineering Juniors.
An abbreviated course in D.C. and A.C. circuits and machines, adapted to the needs of students in civil engineering. Lecture: three hours; laboratory: two hours.
Prerequisites: Math. 202; Physics 202.

401. *Electron Tubes* Five Credit Hours
Required of Electrical Engineering Seniors.
Characteristics of high-vacuum and gas-filled tubes; theory and design

of rectifier, amplifier, and cathode-ray tube circuits. Lecture: five hours.
Prerequisites: E.E. 302, 304; Physics 302; Math. 302.

402. *Applications of Electron Tubes* Five Credit Hours
Required of Electrical Engineering Seniors.
Theory and design of electron tube circuits; audio, video, and radio-frequency amplifiers; oscillators, modulators, and detectors; A.M. and F.M. broadcasting systems. Lecture: five hours.
Prerequisites: E.E. 401, 403, 405, 407, 411.

403. *Electron Tubes Laboratory* Two Credit Hours
Required of Electrical Engineering Seniors.
A laboratory course to accompany E.E. 401. Laboratory: four hours.

404. *Electronics Laboratory* Two Credit Hours
Required of Electrical Engineering Seniors.
A laboratory course to accompany E.E. 402. Laboratory: four hours.

405. *Electrical Measurements* Three Credit Hours
Required of Electrical Engineering Seniors.
Modern methods of measuring current, electromotive force, inductance, capacitance, and magnetic quantities; calibration of electrical instruments; location of circuit faults. Lecture: three hours.
Prerequisites: E.E. 302, 304; Physics 302; Math. 302.

406. *Introduction to Electronics* Four Credit Hours
Required of Physics Seniors.
Characteristics of electron tubes and their use as rectifiers, amplifiers, and oscillators. A course designed to introduce students to the use of electron tubes and circuits in the field of measurements. Lecture: three hours; laboratory: two hours.
Prerequisite: E.E. 413.

407. *Electrical Measurements Laboratory* Two Credit Hours
Required of Electrical Engineering Seniors.
A laboratory course to accompany E.E. 405. Laboratory: four hours.

408. *Transmission Lines* Three Credit Hours
Required of Electrical Engineering Seniors.
Lines with lumped constants; hyperbolic functions applied to the treatment of long transmission lines with distributed constants; wave filter networks; equivalent circuits; transformations in circuit solutions. Lecture: three hours.
Prerequisites: E.E. 401, 411.

409. *Heat Engines* Three Credit Hours
Required of Electrical Engineering Seniors.
Principles of energy transformation in boilers, steam engines, turbines, internal combustion engines, air compressors, and refrigerating appar-

atus; fundamental thermodynamics; thermodynamic analyses of the operation of heat engines. Lecture: three hours.
Prerequisites: Physics 302; Math. 202.

410. *Power Plant Engineering and Design* Three Credit Hours
Required of Electrical Engineering Seniors.
A survey of power plant design and operation; economic factors in power plant design, construction, operation, and in power distribution. Lecture: three hours.
Prerequisites: E.E. 409, 411.

411. *Advanced A.C. Theory* Three Credit Hours
Required of Electrical Engineering Seniors.
Treatment of transients and oscillatory circuits by the use of differential equations; analysis of complex A.C. waves; complex variable solution of A.C. circuits; unbalanced polyphase circuits; the Fourier Series applied to analyses of waves and pulses. Lecture: three hours.
Prerequisites: E.E. 302; Physics 302; Math. 302.

413. *Electrical Engineering* Seven Credit Hours
Required of Physics Seniors.
A composite course arranged to meet the specific needs of students in advanced physics. Abbreviated study of A.C. and D.C. circuits and machines; selected topics, such as simple transients, magnetic testing, absolute measurements of electrical quantities. Lecture: five hours; laboratory: four hours.
Prerequisites: Physics 302.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. **See page 52.**

DEPARTMENT OF ENGLISH

The objectives of the Department of English are to make the student proficient in the use of his own language and to develop in him, through the directed study of the great literature of England and America, not simply an understanding and appreciation of the masterpieces read, but particularly an ability to approach literature independently with some confidence of recognizing both its art and its meaning.

English is required of all students in freshman and sophomore years, and may be chosen as a major course of study for junior and senior years.

Offering a reasonable mastery of the English language and a broad cultural background attendant upon a study of English and American literature, major work in English provides a firm foundation for numerous fields of endeavor: the teaching of English, creative writing, journalism, the ministry, law, and certain types of business. The depart-

ment allows its students at least five electives in their junior and senior years in order that they may take in other departments subjects further necessary to their anticipated careers. These subjects must be chosen, however, in consultation with the head of the department.

A student who elects English as his major course of study is required to take English 203, 204 (The English Language) in addition to 201, 202 (A Survey of English Literature) in his sophomore year. If, for some legitimate reason, he cannot take 203, 204 in his sophomore year, he must take it in his junior year. In the junior year he must take two full-year courses, or the equivalent, in English; and in the senior year, three. English 401, 402 (Shakespeare) and English 403, 404 (American Literature) are required courses; otherwise the student is free to choose from the courses offered by the department in any given year. It should be noted, however, that 205, 206, 208 (Public Speaking), 405, 406 (World Literature), and 409, 411 (Creative Writing) are not courses which fulfill requirements for major work. For further details see the tabulation of the curriculum for the English Elective under the heading "Courses of Study."

101, 102. *Composition and Literature* Six Credit Hours

Required of freshmen who, on the basis of nationally approved tests, show some real understanding of the fundamentals of the English language.

The development of the basic skills of writing and reading, and some development of the critical faculty as applied to literature. Lecture: three hours.

103, 104. *Composition and Literature* Six Credit Hours

Required of freshmen who, on the basis of tests, show considerable lack of understanding of the fundamentals of the English language.

The same course as English 101, 102, but with an additional class hour each week so that there may be more time for the mastery of fundamentals. Lecture: four hours.

105, 106. *English for Spanish-speaking Students* Six Credit Hours

A course in English as a foreign language, taught in the Department of Modern Languages with the cooperation of the Department of English, and made mandatory for the fulfillment of the general Modern Language requirement for those Spanish-speaking students matriculating at The Citadel with too little English to succeed. Lecture: three hours.

201, 202. *A Survey of English Literature* Six Credit Hours

Required of all sophomores.

A tracing of the course of English literature from the earliest times to the end of the nineteenth century as it is seen in the selected works of some twelve masters; analysis and appraisal of the masterpieces read; frequent themes on the works studied. Lecture: three hours.

Prerequisite: Engl. 101, 102 or 103, 104.

203. *The English Language: History and Grammar* Three Credit Hours

Required of sophomores majoring in English. Open as an elective to others.

An introductory survey of the development of Modern English, beginning with the Indo-European background, including the more notable morphological and phonological changes from the Old English period to the modern period, and concluding with emphasis on standard current English grammar and usage. Lecture: three hours.

204. *The English Language: General Semantics* Three Credit Hours

Required of sophomores majoring in English. Open as an elective to others.

A psychological approach to the study of language as an abstracting process employing a system of verbal symbols for informative, directive, and affective purposes. Lecture: three hours.

205. *Introduction to Public Speaking* Three Credit Hours

Open to sophomores, juniors, and seniors.

The general principles of speech composition and speech presentation; practice in expository speaking. Lecture: threee hours.

206. *Persuasive Speaking* Three Credit Hours

Open to sophomores, juniors, and seniors.

Logic, rhetoric, and psychology of securing desired reactions from friendly, neutral, and hostile audiences; sources of speech material and planning the speech; improvement of volume, diction, rate, and platform manners in extemporaneous and manuscript delivery of classroom speeches. Lecture: three hours.

Prerequisite: Public Speaking 205.

208. *Argumentation and Debate* Three Credit Hours

Open to sophomores, juniors, and seniors.

Inductive, deductive, and causal reasoning; literal and figurative analogies; types of common fallacies; kinds of evidence and presentation of evidence; use of statistics; group discussions; the formal brief and the formal debate; parliamentary procedure; criticism of classroom and auditorium speeches. Lecture: three hours.

Prerequisite: Public Speaking 205.

Except for Shakespeare (401, 402) *and American Literature* (403, 404), *which are offered every year, the following courses are offered in alternate years. Unstarred courses are offered in* 1955-56; *starred courses, in* 1956-57.

301. *Chaucer* Three Credit Hours

Open to juniors and seniors.

An introduction to Chaucer's language, narrative skill, and mastery

of poetic forms through reading in the original "The General Prologue" and representative tales from *The Canterbury Tales.* Lecture: three hours.

302. *Seventeenth Century Poetry* Three Credit Hours
Open to juniors and seniors.
A study of representative poetry of Ben Jonson and "his sons," of Donne and the metaphysical poets, and especially of Milton. Lecture: three hours.

303. *Neoclassicism,* 1660-1744 Three Credit Hours
Open to juniors and seniors.
Dryden, Addison, Swift, Pope, with some attention to the lesser writers of the period. Lecture: three hours.

304. *The Romantic Movement* Three Credit Hours
Open to juniors and seniors.
A study of the chief features which culminated in the Romantic writings of the early nineteenth century with special emphasis on the five major poets: Wordsworth, Coleridge, Byron, Shelley, Keats. Lecture: three hours.

*305. *Victorian Poetry and Prose* Three Credit Hours
Open to juniors and seniors.
A study of the period from 1830 to 1900 showing the effects of the Industrial and Scientific Revolutions on traditional attitudes toward art and life through the works of the major writers of the period, with emphasis upon the poetry of Tennyson, Browning, and Swinburne and upon the prose of Carlyle, Arnold, Huxley, and Pater. Lecture: three hours.

*306. *Modern British and American Poetry* Three Credit Hours
Open to juniors and seniors.
Study of the poetry of Yeats, Robinson, Frost, Eliot, and Auden from as extensive a reading of their work as time permits; lectures planned to provide a foundation for future reading in these five and other poets; term essay and a class report on a twentieth century poet other than the above five, each member of the class studying a different poet. Lecture: three hours.

*307. *A Survey of English Drama to Shaw* Three Credit Hours
Open to juniors and seniors.
A tracing of the course of English drama from its origin in medieval times to the beginnings of modern drama in the middle of the nineteenth century. Detailed study of representative plays. Lecture: three hours.

*308. *Modern British and American Drama* Three Credit Hours
Open to juniors and seniors.
A detailed study of a few representative plays to show the major trends in British and American drama since the time of Ibsen.

*309. *A Survey of the English Novel to* 1900 Three Credit Hours
Open to juniors and seniors.
Lectures on narrative forms which preceded the novel and on lives and works of major eighteenth- and nineteenth-century novelists; reading and discussion of six of their novels. Lecture: three hours.

*310. *Modern British and American Novel* Three Credit Hours
Open to juniors and seniors.
Beginning with Conrad and Howells, a study of British and American novels since 1900. Required reading: eight novels. Lecture: three hours.

401, 402. *Shakespeare* Six Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
An intensive study of some twelve plays—comedies, histories, tragedies, and dramatic romances—to give the student insight into the greatness of Shakespeare as dramatist, poet, and illuminator of life. Lecture: three hours.

403, 404. *American Literature* Six Credit Hours
Required of all English majors. Open as an elective to other juniors and seniors.
A study of some of the best writing of twelve to fifteen of the major American authors from colonial times to the present; emphasis upon how literature exhibits intrinsic artistic merit and upon how it reflects American cultural development. Lecture: three hours.

*405. *World Literature* Three Credit Hours
Open to juniors and seniors.
An introduction through standard translations to the basic masterpieces of Greek and Roman classics, and a consideration of their influence on Western thought and culture. Lecture: three hours.

*406. *World Literature* Three Credit Hours
Open to juniors and seniors.
A study of selected masterpieces in translation of Western European literature from the Renaissance through the nineteenth century. Lecture: three hours.

407, 408. *Principles of Literary Criticism in English* Six Credit Hours
Open to departmental seniors and to any student who has completed two full-year courses in English, or the equivalent, above the sophomore level.
A study of the classical tradition in criticism, the Renaissance restatement, and neoclassic developments; and of the development of modern criticism. Lecture: three hours.

*409. *Writing Poetry* Three Credit Hours
Open to juniors and seniors.

Analysis of and practice in writing poetry; varied in accordance with the experience and expectation of the students registered. Lecture: three hours.

411. *Writing the Short Story* Three Credit Hours

Open to juniors and seniors.

Analysis of short stories, followed by practice in writing them. Lecture: three hours.

420. *Senior Essay* Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF HISTORY

The Department of History endeavors to give to the student an acquaintance with and an appreciation of our heritage; to enable him to see causes and effects, contrasts and comparisons as shown in the development of civilization; to give him an accurate knowledge of the history of his own country and to familiarize him with its institutions and the democratic ideals which have influenced American life; to acquaint the student who elects this subject with the standard works in its various fields and to prepare him to pursue graduate work.

Students electing history as a major are required to take in addition to the freshman survey (History 101, 102) the following courses: History 201, 202; History 301, 302; and a total of twenty-one semester hours selected from the junior and senior courses offered by the department. They are also required to take two years of a modern language, Economic Foundations of Modern Life, American Government, and either International Politics or the American Constitution. For further details see the tabulation of the curriculum for a History Major, page 61.

Courses marked with an asterisk (*) are usually offered in alternate years or on demand.

101, 102. *A Survey of American History* Six Credit Hours

Required of all freshmen except majors in Civil Engineering, Electrical Engineering, Physics and Mathematics. Required of sophomores majoring in Physics and Mathematics, and of juniors in Electrical Engineering. Taken as an option by Civil Engineering students in the junior year.

Survey of American history from the period of discovery to the present; a brief treatment of the colonial period, followed by a more detailed study of such subjects as the causes of the Revolution, the framing of the Constitution, the development of political parties, the sectional conflict, economic progress and problems, and foreign relations; special

emphasis placed on understanding the nature of American democracy and the role of the United States in world affairs from 1789 to the present.

201, 202. *A Survey of European Civilization Since* 1500 — Six Credit Hours

Required of all sophomores majoring in History, Political Science, English and Modern Languages, and of seniors in Physical Education. The historical background of contemporary civilization, with emphasis on movements and developments of enduring significance; the evolution of national states; the growth of representative and democratic institutions of government; the development of modern capitalism; the origins of current international conflicts; the progress of science, art and literature.

301, 302. *History of England* — Six Credit Hours

Required of all History majors.

A survey of English history from early times to the present; emphasis on the formation of the English constitution, the growth of limited monarchy, and the evolution of parliament; stress throughout the courses on social and economic factors conditioning political changes.

*303, 304. *The United States since* 1900 — Six Credit Hours

Juniors majoring in History are usually required to take either History 303, 304 or History 305, 306.

American social, cultural, economic and political development in the twentieth century; emphasis on the increasing importance of the United States in world affairs and significant political and economic changes.

*305, 306. *European History since* 1870 — Six Credit Hours

The development of democracy in the leading European states, the growth of colonial empires, the origins of World War I and World War II, efforts toward international organization and collective security, and the rise of totalitarian states.

*307. *Studies in Biography* — Three Credit Hours

The study of significant personalities in European or American history; primarily a discussion course, with a few informal lectures.

309. *The American Civil War and Reconstruction* — Three Credit Hours

Emphasis on the political, economic, and social developments of the period, with some attention to the military aspects of the war.

310. *The Era of the French Revolution and Napoleon* — Three Credit Hours

A detailed analysis of the causes of the Revolution, followed by a survey of the principal events of the period, stressing the innovations of the Revolutionary governments, the causes of Napoleon's rise to

power, his achievements in France and in Europe, the reasons for his eventual downfall.

*312. *The New South* Three Credit Hours
The political, economic, and social development of the South since 1877; emphasis on contemporary regional problems and their impact on American life.

*313. *Studies in American Economic and Social History* Three Credit Hours
Topics in American social and economic history selected for their past or present significance; primarily a discussion course.

315, 316. *History of Modern Warfare* Six Credit Hours
A survey of the development of the theory and practice of modern warfare, emphasizing the effect of changing social, economic, and political conditions and the influence of technological advances.

*401, 402. *History of American Diplomacy* Six Credit Hours
Seniors majoring in history are usually required to take either History 401, 402, History 403, 404 or History 409, 410.
History of American foreign relations emphasizing underlying ideals and principles, the problems resulting from commercial and territorial expansion, and the role of the United States in world affairs.

*403, 404. *Latin American History* Six Credit Hours
Survey of the economic, cultural, and political development of Latin American; study of the nations as a unit, with special attention to the individuality of each; concentration by each student in his collateral reading on some one country.

*405, 406. *History of Colonial America* Six Credit Hours
Seniors majoring in history are usually required to take either History 405, 406 or History 407, 408
A more detailed treatment of the foundations of American civilization than in History 101, 102; the motives of colonization, the evolution of self-government, the extension of the frontier, economic, social, and religious life, the causes of the Revolution, the problems of the Confederation.

*407, 408. *History of the Ancient World and the Middle Ages* Six Credit Hours
The Ancient World in the first semester, the Middle Ages in the second; a survey of the history of the Greeks, the Romans, and the people of the Middle Ages, their wars and political institutions, their economic and social life, their cultural and intellectual achievements.

*409, 410. *History of the Far East* Six Credit Hours
Treating the development of Far Eastern civilizations from the classical period to the present, emphasizing the Western impact on those civilizations, and the growth of nationalism in the Far East.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

GEOGRAPHY

309. *Elementary Geography* Three Credit Hours
An introductory course dealing primarily with the elements and principles of geography.

310. *Cultural Geography* Three Credit Hours
An application of geographic principles to human activities in selected regions of the world.

*311. *Economic Geography* Three Credit Hours
The geographic foundations of economic activities in different parts of the world.

*312. *Historical Geography* Three Credit Hours
A survey of geographic influences in history.

DEPARTMENT OF MATHEMATICS

All students at The Citadel take at least one year of mathematics and the department meets this requirement by offering two types of first year courses designed to provide the mathematical training needed in the several major fields of study.

For the students who elect mathematics as a major field of study, the department offers a program which will qualify them to teach in secondary schools or to enter graduate schools in full standing. All such students take three advanced courses in mathematics beyond the standard junior course in differential equations.

The customary mathematical techniques are developed in all the courses of the department, but students are encouraged to obtain results through reasoning processes rather than by stereotyped use of formulas.

101, 102. *Mathematical Analysis* Ten Credit Hours
Required of all freshmen in the science and engineering electives.
Theory of equations; progressions; the binomial theorem; inequalities; the trigonometric functions; trigonometric identities and equations; logarithms; solutions of triangles; coordinate systems; the straight line; the conics; curve tracing; the straight line and plane in space; the quadric surfaces.

103, 104. *General Mathematics* Six Credit Hours
Required of all freshmen in the arts, business administration, pre-medical, and pre-dental electives.

Algebraic operations; exponents and radicals; linear equations; quadratic equations; progressions; the binomial theorem; simple and compound interest; annuities; frequency distributions; averages; measures of dispersion; logarithms; the trigonometric functions; solution of triangles; trigonometric identities.

201, 202. *The Calculus* Ten Credit Hours
Required of all sophomores in the science and engineering electives.
Theory of differentiation; application of derivatives; theory of integrations; application of integrals; series; partial differentiation; multiple integrals.
Prerequisite: Mathematics 101, 102.

301, 302. *Differential Equations* Six Credit Hours
Required of all juniors in the electrical engineering, mathematics, and physics electives.
Differential equations of the first order and degree; linear equations with constant coefficients; miscellaneous differential equations; applications; power series solutions; partial differential equations; Fourier series.
Prerequisite: Mathematics 201, 202.

303, 304. *Algebraic Theories and Applications* Six Credit Hours
Foundations of the number system; theory of equations; determinants and matrices.
Prerequisite: Mathematics 201, 202.

305, 306. *Modern Geometry* Six Credit Hours
Fundamental theorems; transformations; harmonic sets; properties of triangles and circles; construction problems.
Prerequisite: Mathematics 201, 202.

307, 308. *Projective Geometry* Six Credit Hours
Homogeneous point and line coordinates; principle of duality; cross ratio; projective forms; the conics and their properties.
Prerequisite: Mathematics 201, 202.

401, 402. *Advanced Calculus* Six Credit Hours
Vector calculus; Bessel's functions; partial differential equations; Fourier series; Laplace transforms; functions of a complex variable.
Prerequisite: Mathematics 301, 302.

403, 404. *Functions of a Complex Variable* Six Credit Hours
Real and complex numbers; differentiation and integration of a function of a complex variable; mapping; the linear fractional transformation; infinite series; properties of single-valued and multiple-valued functions.
Prerequisite: Mathematics 301, 302.

405, 406. *The Mathematical Theory of Statistics* Six Credit Hours
Frequency distributions; averages; measures of dispersion; correlation probability; the normal curve; theory of sampling.
Prerequisite: Mathematics 301, 302.

N. B. Two of these advanced courses will be offered each year.

420. *Senior Essay* Two Credit Hours
Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF MILITARY SCIENCE AND TACTICS

The Department of Military Science and Tactics is an academic department of The Citadel and includes all Army Reserve Officers' Training Corps (AROTC) activities. The mission of the AROTC is to produce junior officers who have the qualities and attributes essential to their continued development as officers in the United States Army Reserve and the Regular Army. In keeping with this mission, the Department of Military Science and Tactics offers a four year General Military Science Course of instruction in subjects common to all branches of the Army. Outstanding ROTC cadets are usually offered a commission in the Regular Army under the provisions of the Distinguished Military Student Program. As a prerequisite for a commission, a cadet must have received a baccalaureate degree.

The four year course of Military Science is divided into a Basic Course which is pursued during the lower two years, and an Advanced Course which is pursued during the upper two years. Cadets formally enrolled in the Advanced Course receive from the U. S. Government a subsistence allowance of approximately $27.00 a month.

Applicants for formal enrollment in the Army R0TC must:

Be cititzens of the United States

Be physically qualified under standards prescibed by the Department of the Army

Be over fourteen years of age and under twenty-three years at the time of initial enrollment

Be maintaining satisfactory scholastic standing as required by the institution.

Cadets who cannot meet the requirements for formal enrollment in the ROTC are nevertheless required by college regulations to pursue the four year course of instruction offered by the Department of Military Science and Tactics or by the Department of Air Science and Tactics. Cadets who at a later period are able to meet the requirements for formal enrollment in the ROTC are usually given ROTC credit for all work satisfactorily completed in Military Science.

It is a requirement of the Department of the Army that the academic and military instruction of all cadets be in phase. Thus, freshmen only pusue MS I (Military Science), sophomores MS II, juniors MS III, and seniors MS IV.

Applicants for enrollment who have previous ROTC training and seek advanced standing in Military Science must present to The Registrar, The Citadel, a copy of their record as an ROTC student attested by the Professor of Military (Air) (Naval) Science and Tactics of the school or college previously attended. Cadets with previous training in the Armed Forces may receive such credit toward advanced ROTC standing as is determined by the Professor of Military Science and Tactics.

Cadets who are accepted for formal enrollment in the ROTC are given Selective Service Deferments which remain in effect as long as the cadet maintains satisfactory academic and military grades. The deferment agreement permits the cadet to complete his college course of instruction but requires that he accept a commission, if offered, and serve on active duty for a period of two years.

The course of instruction for the four years is as follows:

101, 102. *Military Science I* (90 hours) Four Credit Hours
Organization of the Army and ROTC; American military history; individual weapons and marksmanships; school of the soldier and exercise of command.

201, 202. *Military Science II* (90 hours) Four Credit Hours
Crew served weapons and gunnery; map and aerial photograph reading; school of the soldier and exercise of command.
Prerequisite: Military Science 101, 102.

301, 302. *Military Science III* (150 hours) Six Credit Hours
Small unit tactics and communications; organization, function and mission of the arms and services; military teaching methods; leadership, school of the soldier, and exercise of command.
Prerequisite: Military Science 201, 202.

Summer Camp Training: Upon the completion of Military Science III all formally enrolled ROTC cadets are required to attend the Summer Camp for practical instruction and field training. The course lasts six weeks and begins on or about 20 June. Each camp is conducted by the Army at an appropriate army camp or station and is considered a concentrated laboratory course in Military Science and Tactics where the theory learned in the classroom is put into practice.

401, 402. *Military Science IV* (150 hours) Six Credit Hours
Logistics, operation; military adminstration and personnel management; service orientation; school of the soldier and exercise of command.
Prerequisite: Military Science 301, 302.

It is the purpose of the Department of Modern Languages that students majoring in this subject shall receive a thorough knowledge of one language, written and spoken, a reasonable degree of competence in a second, and a good understanding of the important writers, the literary developments, and the cultures which these languages represent. The aims of the department are both to develop understanding of other civilizations and to prepare the student to follow a career requiring linguistic skill or literary knowledge. He is prepared to do graduate work in a language if he so desires.

In a world being rapidly drawn together by improved means of communication, yet with its parts still sharply differentiated in language, customs, and ways of thinking, it is important that an educated man should not be reduced to indirect and highly defective means of contact with all cultures other than his own. While one cannot learn all languages, certain ones, such as French, German, and Spanish, are widely used outside the countries where they originated and are keys to a better understanding of mankind. For scientific research and for many commercial and professional positions, knowledge of languages may prove valuable or even essential.

Students who elect languages as their major field must satisfactorily complete seven courses in languages, including, for one language, at least two courses above the intermediate level. They must complete the Survey of French Literature. The exact sequence of their courses may vary according to the language chosen for their major work and the point at which their college work in languages was begun. Students wishing to take a language course as an elective may take any course for which they have done the prerequisite work.

In courses above the intermediate level, the work of each semester is a unit, and credit will be given for its successful completion.

French

101, 102. *Elementary French* Six Credit Hours
For students who elect French and have entered The Citadel with less than two units of the language.
The reading and writing of simple French; dictation; elementary conversation with drill in pronunciation; elements of French grammar.

201, 202. *Intermediate French* Six Credit Hours
For students who have completed 102, or have entered The Citadel with two or three units in the language.
Readings from authors of the nineteenth and twentieth centuries; composition and conversation based on the reading material; grammar reveiw to correct faults in usuage.

301, 302. *Introductory Survey of French Literature* Six Credit Hours

Required for the modern language elective course. Open to students who have completed 202.

A general survey of French Literature from its beginnings through the nineteenth century; extensive reading, reports, discussion in French.

The following courses will be given when there is sufficient demand, and according to the wishes and needs of the students.

401, 402. *French Composition and Conversation* Six Credit Hours

Open to students who have completed French 302, or who have completed French 202 with a grade of A or B.

Composition and conversation with grammar review when needed, to produce fluency and accuracy in the use of spoken and written French; students are introduced to an elementary form of the *explication de textes.*

403, 404. *Eighteenth Century French Literature* Six Credit Hours

Political and philosophical thought in the eighteenth century, traced through the writings of Monsesquieu, Voltaire, and Rousseau; the beginnings of Romanticism as shown in Rousseau and other writers; lectures in French; collateral readings and reports.

Prerequisite: French 302.

405, 406. *The Classical Period of French Literature* Six Credit Hours

The literature of the seventeenth century, in which France made its most distinctive and in many respects finest contribution to the world's literature and culture; especial attention given to the plays of Corneille, Racine, and Molière.

Prerequisite: French 302.

407, 408. *Nineteenth Century French Literature* Six Credit Hours

French literature from Chateaubriand to Zola and Anatole France; the Romantic, realistic, and naturalistic movements, with special emphasis on Balzac, Hugo, and Flaubert; lectures in French, discussion, outside reading.

Prerequisite: French 302.

German

101, 102. *Elementary German* Six Credit Hours

For students who elect German and have entered The Citadel with less than two units of the language.

Pronunciation and the elements of German grammar; written and oral exercises; translation of simple German into English.

202, 202. *Scientific German* Six Credit Hours

For the students taking the chemistry, physics, or pre-medical course.

First-year grammar study continued; translation of texts in various

sciences; special stress on sentence structure and word-building.
Prerequisite: German 102 or two entrance units.

203, 204. *Intermediate German* Six Credit Hours
Completion and review of elementary grammar; reading of texts from German literature; and conversation in German.
Prerequisite: German 102 or two entrance units.

301, 302. *German Literature of the Nineteenth Century* Six Credit Hours
Representative work of outstanding novelists and dramatists, with discussion of the literature of the period; assigned reading and reports.

401, 402. *Goethe's Faust* Six Credit Hours
Goethe's greatest drama *Faust* studied in connection with his life and with regard to his message today; its genesis and growth; translation of Part I and selections from Part II; *Faust das Puppenspiel* and its relation to Goethe's *Faust;* lectures, reading, and reports.

Spanish

101, 102. *Elementary Spanish* Six Credit Hours
For students who elect Spanish and have entered The Citadel with less than two units of the language.
Essentially a drill course in the reading, writing, and speaking of simple Spanish.

201, 202. *Business Spanish* Six Credit Hours
Primarily for Students in Business Administration.
An intermediate course, to develop the student's understanding of oral and written Spanish; texts deal with Spanish America; some work in business terminology and correspondence.
Prerequisite: Spanish 102 or two entrance credits.

203, 204. *Intermediate Spanish* Six Credit Hours
Continuation of elementary work, with reading of nineteenth century or contemporary authors; classroom composition and conversation. Credit not given for both 201, 202 and 203, 204.

301, 302. *Spanish Literature of the Golden Age* Six Credit Hours
Literature of the late sixteenth and seventeenth centuries, the age producing the characters of Don Quixote and Don Jaun; a study of the works of Cervantes, Lope, Tirso, Calderon, and others.
Prerequisite: Spanish 204 or 202, or four entrance units, or equivalent competence in the language.

303, 304. *Spanish-American Literature* Six Credit Hours
Leading works from Mexico and Central and South America studied, with both individual and class reading.

Prerequisite: Same as for Spanish 301, 302. Given in alternate years with that course.

All Modern Languages

420. *Senior Essay* Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF PHYSICS

It is the purpose of the Department of Physics to offer to all students at The Citadel a fundamental course in one of the basic physical sciences, to afford to pre-medical students an adequate preparation in physics for admission to the best medical schools, and to offer to students specializing in other departments such advanced courses in physics as are necessary to meet their needs. To students taking their major work in the Department, it offers a program of courses sufficient to enable them to enroll as graduate students in full standing at the leading universities or to fill positions as assistant physicists in the government service and in industrial laboratories.

The rooms of the department are located on the first and second floors at the east end of Bond Hall. On the second floor are the offices of the department, a lecture room seating about one hundred and fifty, two smaller lecture rooms, three class rooms, and two general laboratories for sophomore work. On the first floor are a photometric laboratory, a laboratory for the junior work of physics majors and pre-medical students, a laboratory for senior work, and a machine shop. A storage battery room containing a 64-volt storage battery, clock relay room, and storerooms are also located on this floor. Distributing panels, connected with the main electrical switchboard, are located in the junior and senior laboratories. At all laboratory tables and lecture desks electric power, either D. C. or A. C., of any desired voltage is available either from the storage battery, a direct current generator, or the commercial A.C. power supply. The lecture rooms and laboratories are conveniently arranged and adequately equipped.

An active chapter of Sigma Pi Sigma, Physics Honor Society, has been maintained at The Citadel since 1941.

The requirement of one year of physics in the sophomore class can be met by Physics 201, 202 in all courses of study. Physics 203, 204 does not satisfy the requirement in a science or engineering elective. The objectives, methods, and to some extent the content in these two courses are different. Accordingly, Physics 201 will be followed by

Physics 202 even by those students who change to a different course of study during the first semester of the sophomore year. Physics 203 will be followed by Physics 204. The approval of the Department of Physics is required for any deviation from these procedures.

Students taking physics as their major work are required to take a total of forty credit hours in the department, including all courses offered except Physics 203, 204, 305, 306, and 405. In addition, they are required to take Electrical Engineering 413 and 406; Mathematics 101, 102, 201, 202, 301, and 302; German 201 and 202. For valid reasons the study of German 201 and 202 may be postponed to the junior or senior year. Physics majors are advised to choose their electives from the following: Mathematics 401, 402; Chemistry 201, 202, 303, 304, 401, and 402.

201, 202. *Elementary College Physics* Eight Credit Hours

Open to all sophomores. Required of all sophomores majoring in science, engineering, or mathematics.

The less mathematical portions of mechanics, heat, electricity, sound, and light covered with no assumption of prior knowledge of physics; laboratory work of about twenty-eight individual quantitative experiments based on fundamental principles discussed in lectures; instruction in the use of the slide rule, required equipment. Lecture: three hours; laboratory: two hours.

Prerequisite: To be preceded or accompanied by Math. 102 or 104.

203, 204. *Introduction to College Physics* Eight Credit Hours

Required of all sophomores who do not take Physics 201, 202.

A course similar to Physics 201, 202, adapted to the needs of students who expect to take no additional courses in the physical sciences and including recent developments in physics bearing directly on everyday life; laboratory periods devoted to experiments conducted by the instructor, solution of problems, showing of technical films or individual experiments performed by the students. Lecture: three hours; laboratory: two hours.

Prerequisite: To be preceded or accompanied by Math. 102 or 104.

301, 302. *Advanced General Physics* Ten Credit Hours

Required of all Physics Juniors; open to other juniors.

A continuation of Physics 201, 202 covering in a more advanced and mathematical manner portions of mechanics, heat, electricity and magnetism not included in the earlier course. Lecture: five hours.

Prerequisites: Physics 201, 202; Math. 201.

303, 304. *Laboratory Physics* Four Credit Hours

Required of all Physics Juniors; open to others.

A study in the laboratory of most of the topics considered in Physics 301, 302; about sixty more advanced experiments that those in Phy-

sics 201, 202 involving the use of most of the standard instruments of physical measurement. Laboratory: four hours.
Prerequisites: To be preceded or accompanied by Physics 301 or 302.

305, 306. *Physics for Pre-Medical Students* Six Credit Hours
Required of all Pre-Medical Juniors.
Designed to meet the requirement in laboratory physics for admission to the best medical schools; about thirty individual quantitative experiments dealing with mechanics, molecular physics, heat, electricity, sound, and light. Lecture: two hours; laboratory: two hours.
Prerequisites: Physics 201, 202.

307. *Wave Motion, Sound, and Geometrical Optics* Four Credit Hours
Required of all Physics Juniors; open to others.
The general equations of wave motion with application to sound and light; the velocity of sound waves, reflection, refraction and dispersion of light in theory and experiment; approximately five laboratory experiments in sound and ten in geometrical optics. Lecture: three hours; laboratory: two hours.
Prerequisites: Physics 201, 202; Math. 201, 202.

308. *Light* Four Credit Hours
Required of all Physics Juniors; open to others.
The phenomena of interference, diffraction, polarization, and double refraction studied both theoretically and experimentally; Maxwell's equations for an electromagnetic wave with applications to some light phenomena. Lecture: three hours; laboratory: two hours.
Prerequisite: Physics 307.

401. *Advanced Physics* Three Credit Hours
Required of all Physics Seniors; open to others.
Selected topics in mechanics, heat, and electricity to fit the needs of the students and to introduce the methods of theoretical physics. Lecture: three hours.
Prerequisites: Physics 301, 302.

402. *Modern Physics* Three Credit Hours
Required of all Physics Seniors; open to others.
Topics selected from recent developments which emphasize the fundamental experiments and relationships, atomic and nuclear structure, x-rays and radioactivity. Lecture: three hours.
Prerequisites: Physics 301, 302.

403, 404. *Advanced Laboratory Physics* Two Credit Hours
Required of all Physics Seniors.
A course to accompany Physics 401 and 402. Experiments of a more advanced nature in mechanics, heat, and electricity and experiments in modern physics including electron emission, determination

of electronic charge, e/m for electrons, conduction of electricity through gases, x-rays and radioactivity. Laboratory: two hours.

405. *Advanced Physics* Three Credit Hours

Senior Elective.

The principles of mechanics, heat, electricity and light essential in the study of modern physics; lectures and demonstration experiments on many topics covered more completely in Physics 307, 308, 401. Lecture: three hours.

Prerequisites: Physics 301, 302.

420. *Senior Essay*

Required of all seniors as a prerequisite to graduation. See page 52.

DEPARTMENT OF POLITICAL SCIENCE

The curriculum of political science at The Citadel is planned to give the student a background in the political, social, and economic developments of the modern world. It seeks an understanding and interpretation of tendencies, a breadth of view, and a spirit of scientific inquiry; it undertakes to provide a broad, liberal education designed to prepare a student for his profession or business.

While this program of study is concentrated upon political authority or government, it is recognized that political science does not stand alone but as one of an integrated group of social sciences. Therefore, certain courses in history and economics are required in the curriculum, and courses in sociology, psychology, philosophy, and literature are recommended as electives.

A student who selects political science as his major course of study is required to take Political Science 201 (American National Government) and 202 (State and Local Government) in the sophomore year. For the requirements in the junior and senior years, see page 66. Two years of a modern language are required. There are fifteen hours of electives which may be chosen according to the individual's requirements and interests, subject to the approval of this department.

International Affairs Program

The Political Science Department has long been aware of the increased need for men trained in international affairs and encourages students to prepare for careers in the Foreign Service, State Department, and Intelligence activities. Although the State Department does not designate an arbitrary program of preparation, the curriculum of this department has been prepared in consultation with the State Department.

Students desiring to prepare themselves for careers in these fields should indicate such a desire at the beginning of the junior year. They will follow a special program by selecting their minor electives from special courses in history, sociology, psychology, English, and modern languages.

201. *American National Government* Three Credit Hours
Required of all Political Science Sophomores. Open to others.
The origins and development of the American consitutional system; relations between national and state governments in the American federal system; the political process, with emphasis upon election procedures, public opinion, and pressure group and political party activity; the individual and his government; the institutional organization of the national government; the national government in action.

202. *State and Local Government* Three Credit Hours
Required of Political Science Sophomores. Open to others.
The historic evolution of state governmental and constitutional systems; the role of the states in the American constitutional system; the institutional organization of state governments; the relationship between states and their political subdivisions; the organization and activities of local governmental units.
Prerequisite: Polit. 201.

301, 302. *International Law and Organization* Six Credit Hours
Required of Political Science Juniors. Open to others who receive permission of the instructor.
A survey of international law as developed through treaties, customs, usages, and decisions of national and international tribunals; a study of the League of Nations, the United Nations, and the international machinery for the settlement of international problems and disputes.

303. *American Foreign Relations* Three Credit Hours
Required of Political Science Juniors. Open to others who receive permission of the instructor.
A study of the organization of the American government for the conduct of foreign relations; the institutions and elements in the making of foreign policy; emphasis on the important problems and developments of the post-war years.

304. *American Parties and Politics* Three Credit Hours
Required of Political Science Juniors. Open to others.
An analysis of the dynamics of American politics, with particular emphasis upon the factors entering into the formation of public opinion, the role of pressure groups, and the operations of the party system.

305, 306. *Public Administration* Six Credit Hours
Required of Political Science Juniors. Open to others.
A study of the characteristics of public administration at all levels;

the principles and practices of organization; the role of leadership and its processes; the management of personnel and finance; the effects of the regulatory process upon administration; the problems of securing adminstrative responsibility.
Prerequisites: Polit. 201, 202.

307, 308. *Economic Foundations of Modern Life* Six Credit Hours
Required of Political Science Juniors. Open to others.
Basic economic concepts. National income, diminishing returns, population and progress, organization of business enterprise, social aspects of corporation finance and the securities market, monopoly and monopolistic prices, public utilities regulation, risk, insurance, speculation, money and banking, prices, labor problems and public policy, wages, interest, rent, profits, international trade and finance.

310. *Public Personnel Administration* Three Credit Hours
Open to juniors and seniors.
A study of the structure of governmental personnel management; its processes of securing, training, rewarding, disciplining, and separating employees; analyses of selected cases and problems in human relations in management.

312. *Municipal Government* Three Credit Hours
Open to juniors and seniors.
A study of the legal status of municipalities, their administrative organization; personnel and financial problems; planning and zoning; safety administration; regulatory and management problems.

401, 402. *The American Constitution* Six Credit Hours
Required of Political Science Seniors. Open to others who receive permission of the instructor.
A study of the underlying and basic principles of the Constitution as reflected in the leading decisions of the United States Supreme Court.

403. *Government Finance* Three Credit Hours
Required of Political Science Seniors. Open to other seniors who receive permission of the instructor.
An analysis of the scope and methods of governmental taxing, spending, and borrowing; current financial problems of all levels of government; implications of alternative fiscal problems.
Prerequisites: Polit. 307, 308.

405, 406. *International Politics* Six Credit Hours
Required of Political Science Seniors. Open to other seniors who receive permission of the instructor.
An analysis of the development and distribution of power among nations; the geographic, demographic, economic, political, psychological, and military bases of national power; emphasis on the problems and policies of the major powers.

407, 408. *Political Theory* Six Credit Hours

Required of Political Science Seniors. Open to Art seniors.

Major theoretical writing from Plato to Thomas Hill Green; emphasis on a comparison of basic ideas and on the relationship between theories and contemporary problems.

409, 410. *Far Eastern Affairs* Six Credit Hours

Open to juniors and seniors.

A survey of the Far East and Southeast Asia; a study of the power elements of these areas; emphasis on the role of Asia and its problems in American foreign policy.

411. *Comparative Government* Three Credit Hours

Open to juniors and seniors.

An analysis of the structure and operation of the basic political institutions of the major powers; emphasis on divergent approaches to their common problems.

412. *Administrative Law* Three Credit Hours

Open to seniors with adequate background in history, economics, and political science.

The origins and development of the administrative processes on national, state, and local levels; the scope and limits of administrative powers; the enforcement of administrative action; remedies against administrative action.

413. *National Policy and Administration* Three Credit Hours

Open to juniors and seniors.

Analytical and critical survey of the process of formulating and administering basic domestic policy; the role and influence of special interest groups; the problems of the President and Congress in formulating general interest programs.

414. *Latin American Affairs* Three Credit Hours

Open to juniors and seniors.

A survey of the Latin American area; a study of the power elements and related problems; emphasis on the relationships and importance of the area to the United States.

415. *Middle Eastern Affairs* Three Credit Hours

Open to juniors and seniors.

A survey of the Middle East; a study of the power elements and related problems; emphasis on the role of the area in American foreign policy.

420. *Senior Essay* Two Credit Hours

Required of all seniors as a prerequisite to graduation. See page 52.

The Commandant of Cadets is charged with the co-ordination of R.O.T.C. affairs and with the maintenance of discipline over all students attending The Citadel. He controls the Corps of Cadets in their daily routine of duties, grants leaves and privileges provided by regulations, and maintains conduct records of all cadets. The department exercises supervision over barracks, controls the cadet guard and the officer in charge, and keeps the President of the college informed of matters pertaining to the conduct and discipline of the Corps of Cadets and the veteran students.

The Citadel is a military college, and it is therefore essential that a high standard of discipline be maintained. Through a system of merits and demerits, a record is kept of the conduct of each cadet. This record materially influences both his class and military standing. Privileges of cadets who fail to respond to ordinary corrective measures are curtailed. Any cadet exceeding the allowed limit of demerits for the year may be dismissed.

By instruction and example cadets are taught to be neat in person and in uniform. Daily inspections of rooms insure cleanliness and good order. Through individual personal contacts and group meetings, cadets are encouraged to uphold the traditions of The Citadel and the standards of honor, integrity, and courtesy which are an outstanding mark of the cadet and gentleman.

DEPARTMENT OF CADET AFFAIRS

This department has the following objectives:

1. To assist in college administration.

2. To encourage wholesome student activities of every type in an attempt to enlist the interest and active participation of every student in at least one activity.

3. To supplement the training given by the departments of instruction.

4. To provide services and facilities which contribute to the comfort and guidance of students.

Activities

The system at The Citadel requires that every cadet spend most of his time within the limits of the campus. No cadets leave the campus except at stated leave periods or by specific written permission for a stated purpose. This imposes on the college the duty of providing on the campus the requisites of a stimulating religious, social, intellectual, and recreational life. The college is interested in guiding the development of every student as an individual; hence, to supplement the formal training carried on by the academic and professional departments, the department of sudent activities is charged with the duty of planning, co-ordinating, and supervising a variety of activities to enlist the interest and stimulate the development of students. These include literary and aesthetic pursuits, athletics, and social and recreational activities.

The activities of the department include the cadet publications, the religious programs of the cadet YMCA, the social programs, the Hostess Bureau, and the services and facilities.

The director of student affairs is secretary to all committees and serves as treasurer for all student-activity funds. All moneys received by him are acknowledged by receipt and deposited in the bank to the credit of the activity concerned. Withdrawals are made by check with the approval of the President of The Citadel. Accounts are audited monthly and published.

To help support the activities, each student pays a student-activity fee of $25.50 a semester. This fee is distributed to the various activities as needed.

It is the policy of The Citadel for each department to be self-sustaining financially. A portion of the student-activity fee is allocated to take care of certain costs of administration and maintenance and all cost of services and supplies required in the conduct of the activities.

The Cadet Activitiy Committee, composed of cadets and faculty members appointed by the President of The Citadel, has the duty of

supervising the conduct of the activities. The actual conduct of each activity is under the direction of an appropriately named cadet staff or committee each of which functions under the direction of the Director of Cadet Affairs and a faculty advisor.

Detailed information concerning the various activities supervised by the Student-Activity Committee will be found in the following paragraphs.

Publications

The Brigadier is published semi-monthly by a staff of students. It serves as the campus newspaper and is financed by an allotment from the student-activities fee, augmented by the revenue from subscriptions and the sale of advertising space.

The Shako, the literary magazine, is published three times a year. It is supported by voluntary subscriptions, the income from advertisments, and an allotment from the student-activities fee.

The Sphinx is published annually by a staff of students. This publication serves as a semi-official record for the year. By means of copy and photographs, the faculty and staff, the student classes, the cadet military organization, the athletic activities, the social affairs, and other student programs are portrayed vividly to preserve memories of student life for posterity. *The Sphinx* is financed by an allotment from the student-activities fee and the sale of advertising space.

The Guidon, the cadet handbook, is published annually by a staff of cadets. The handbook contains a complete description of the activities of the college, college history, customs, duties and responsibilities of cadets and deals with other phases of cadet life. It is particularly helpful to entering freshmen. The publication is financed by the allocation of a portion of the Y.M.C.A. fee (paid as a part of the cadet activity fee) and by the sale of advertising space to local business firms. It is distributed to all students at the beginning of the college year.

Religious Program

The religious activity for the cadets is conducted under the direction of the cadet Y.M.C.A. headed by the General Secretary.

The Citadel strives to encourage each cadet to lead an active religious life by making every provision for each to engage in the religious functions of his faith consistently. The many provisions made by which the cadet's religious life may be most beneficial are described elsewhere.

The Y.M.C.A. Cabinet composed of cadets actively supervises and directs the affairs of this program.

Social

The Citadel dances, managed and controlled by the Standing Hop Committee, are an important part of the social life of the Corps. Frequent informal dances are given, the music being furnished by the student orchestra.

There are five formal dances each year: the Thanksgiving Hop, the Christmas Hop, the Senior Hop, the Easter Hop, and the Commencement Hop. These are financed by the Class Fund, a fund made up of semester optional payments of $15.00 (first semester, $7.50; second semester, $7.50) a student, of which 10% is an admission tax. A student paying this fee is admitted to all formal dances without further charge. Making separate payments for the individual dances increases the cost so much that patrons are advised to include the payments to the Class Fund with each semester's installment paid the quartermaster in order that the student may enjoy these dances at a minimum cost.

Hostess Bureau

The Citadel hostess, Mrs. Jesse Gaston, serves as advisor in matters pertaining to the social activities of the college. Under her supervision classes in dancing are conducted, informal dances are held, and a registry of suitable homes for students' lady guests is provided.

Cadet Services

The cadet services operated by the department for the convenience and comfort of cadets include the canteen, the barbershop, the post office, the recreation room, the pool room, the dark room, the tailor shop, the dry cleaning plant, and the auditorium which is equipped with television and motion picture machines and facilities for many types of larger gatherings of cadets.

Literary

Five student societies offer opportunities for discussing subjects of cultural interest and for developing proficiency in public speaking; the Calliopean Literary Society, the International Relations Club, the English Club, the Round Table, and the Radio Club.

The Callionpean Literary Society sponsors forensic interests, including radio speaking, intramural and intercollege debating, and oratory. Membership is open to all students.

The International Relations Club is devoted to the study of contemporary world economic and political problems. Membership is restricted to those students especially interested in government and politics.

The English Club is an organization of students interested in English. At their meetings professional writers are heard, and problems of literary interest are discussed.

The Round Table is a discussion group with a limited membership. Elections are made from lists prepared by the faculty of those students with marked intellectual interests.

The Radio Club is composed of students interested in both the writing and the actual broadcasting of original scripts. Scripts are tested at regular weekly meetings before their presentation over a local station.

Musical Activities

The student orchestra, under the direction of Lieutenant Freda, furnishes the music for all informal dances.

The glee club, under the direction of Captain G. M. Nichols, serves as the choir at chapel services and gives programs in Charleston churches.

The college band, under the direction Lieutenant Freda, provides the music for parades, guard mount, and other official ceremonies.

The music club was formed to bring together in congenial association all students interested in good music. These students have for their use the records and phonograph given The Citadel by the Carnagie Foundation.

Clubs and Societies

The following organizations have been established for the several purposes indicated by their titles: Knox Chemical Society; Student Chapter, American Society of Civil Engineers; Beta Iota Chapter of Pi Sigma Alpha, Political Science Fraternity; Economic Honor Society; Pre-Medical Club; Sigma Pi Sigma; Society of American Military Engineers; American Ordnance Association; Yacht Club; Block "C" Club.

DEPARTMENT OF ATHLETICS

Since the fullest advantages of academic and military life can be derived only by men of sound physique, every student at The Citadel is encouraged to participate in sports as far as his duties will permit. In our ever increasing complex interdependent society the lessons of loyalty, co-operation, and self-sacrifice learned in athletics are of importance. It is the policy of The Citadel to give every reasonable encouragement to the physical development of all students. Fortunately the climate of Charleston makes possible a year-round program of outdoor sports.

The members of the athletic staff are competent and experienced coaches. Each is a college graduate and of high moral character. A physician is in attendance at every scheduled athletic event and due precautions are taken to prevent injuries in training or in athletic contests.

The Citadel is a member of the National Collegiate Athletic Association and of the Southern Conference. Teams engage in intercollegiate competition in football, basketball, wrestling, swimming, tennis, golf, baseball, track and field, and in rifle shooting.

Facilities for a well rounded development in athletics are provided at The Citadel. Johnson Hagood Memorial Stadium, where all home football games are played, seats over 23,000 spectators. The swimming pool at The Citadel is six lanes and of regulation length for official intercollegiate swimming meets. The Citadel Armory, where all home basketball games are played, is large enough for three basketball to be played at one time. All home baseball games are played at College Park field which was formerly used by the Charleston Rebels of the South Atlantic League. This field is enclosed by a concrete block fence and has a covered and screened grandstand which will seat over 3,000 spectators. In the gym, facilities are provided for students to participate in boxing, weight lifting, and gymnastics. These facilities are for the use of all students.

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